LBT-N300/N300K

SERVICE MANUAL

AEP Model UK Model LBT-N300

E Model

LBT-N300/N300K are composed of following models. As for the service manual, it is issued for each component model, then, please refer to it.

COMPONENT MODEL NAME FOR THESE SYSTEM

	AEP UK		LBT-N300K			
			E	EA	MY	SP
CONPACT DISC STEREO DECK RECEIVER	HCD-N300		HCD-N300K			
SPĖAKER SYSTEM	SS-LB300					
TURN TABLE	PS-LX56P					

PARTS LIST

NOTE:

 Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Abbreviation

EA: Saudi Arabia Model MY: Malaysia Model SP: Singapore Model

Part No.	Description
1-501-374-11 1-501-594-31 1-501-659-41	COMMANDER, STANDARD (RM-S300L) ANTENNA, LOOP ANTENNA (FM) (N300:AEP, UK) ANTENNA (FM) (N300K:E, EA, MY, SP) MANUAL, INSTRUCTION (ENGLISH) (UK)
3-798-238-41	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (AEP)
3-798-238-51	MANUAL, INSTRUCTION (GERMAN, DUTCH, ITALIAN) (AEP)
3-798-238-81	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, CHINESE) (E. EA. MY. SP)
	MANUAL, INSTRUCTION (ARABIC) (EA) COVER (MLY), BATTERY (FOR RM-S300L)
	SNOW BOX (L) (FOR PS-LX56P) SNOW BOX (R) (FOR PS-LX56P)

4-971-010-01 CUSHION (FOR HCD)

4-972-653-01 CUSHION (FOR SS)

4-971-341-01 INDIVIDUAL CARTON (N300:AEP, UK) 4-971-343-01 INDIVIDUAL CARTON (N300K:E, EA, SP)

4-974-598-01 INDIVIDUAL CARTÓN (N300K:MY) A-4674-087-A TURN TABLE MAT ASSY (FOR PS-LX56P)

COMPONENT HI-FI STEREO SYSTEM

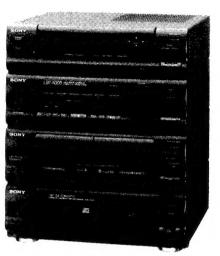
SONY

Sony Corporation
Consumer A&V Products Company
Home A&V Products Div.

English
95B0246-1D
Printed in Japan
© 1995.2
Published by Home A&V Products Div.
Quality Engineering Dept.

HCD-N300/N300K

SERVICE MANUAL



AEP Model UK Model E Model

These set are the tuner, deck, CD and amplifier section in LBT-N300 and LBT-N300K.

Photo: HCD-N300

CD SECTION	Model Name Using Similar Mechanism	HCD-N200	
	Base Unit Type	BU-5BD19	
	Optical Pick-up Type	KSS-213BA	
TAPE DECK SECTION	Model Name Using Similar Mechanism	HCD-N350/N350K	
	Tape Transport Mechanism Type	TCM-220WR2	

SPECIFICATIONS

CD player section

System Compact disc digital audio system

Laser

Semiconductor laser

Wavelength

780-790 nm

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range

EE, CIS models:65.0-74.0 MHz

(10 kHz step) 87.5-108.0 MHz

(50 kHz step)

Other models: 87.5-108.0 MHz

Aerial

FM wire antenna

Aerial terminals

75 ohm unbalanced

Intermediate frequency

10.7 MHz

AM tuner section

Tuning range

AEP, EE, CIS models:

MW:

531-1,602 kHz 153-279 kHz

LW:

(with the tuning interval set

at 3 kHz)

Middle Eastern model:

MW: 531-1,602 kHz

(with the tuning interval set

at 9 kHz)

SW: 5.95-17.90 kHz

Other models:

531-1,602 kHz

(with the tuning interval set

at 9 kHz)

Aerial

AM loop aerial External aerial

terminals

Intermediate frequency

450 kHz

Casette deck section

Recording system

4-track 2-channel stereo

Frequency response

AEP, EE, CIS models:

(DOLBY NR OFF)

 $40-13,000 \text{ Hz} (\pm 3 \text{ dB}), \text{ using}$

Sony TYPE I cassette

40-14,000 Hz (± 3 dB), using

Sony TYPE II cassette

Other models:

 $40-13,000 \text{ Hz} (\pm 3 \text{ dB}), \text{ using}$

Sony TYPE I cassette

40-14,000 Hz ($\pm 3 \text{ dB}$), using

Sony TYPE II cassette

Wow and flutter

± 0.15% W.Peak (IEC)

0.1% W.RMS (NAB)

± 0.2% W.Peak (DIN)

- Continued on next page -

COMPACT DISC DECK RECEIVER SONY

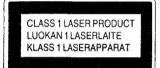


Amplifier section Peak music power output (N300K):	TABLE OF CONTENTS	
650 W	Section Title	Page
Continuous RMS power output:		
30 W+30 W, (6 ohms at 1 kHz,	SECTION 1. SERVICING NOTE	4
DIN) 35 W+35 W, (6 ohms at 1 kHz,	SECTION 2. GENERAL	
5% THD)		
Music power output (N300):	SECTION 3. DISASSEMBLY	
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10% THD) Inputs	3-2. Main Board	
PHONO (phono jack):	3-3. Front Panel	
Sensitivity 3 mV, impedance	3-4. Cassette Lid Assembly	
47 kilohms	3-5. Mechanism Deck Block	
VIDEO (phono jack):	3-7. Optical Pick-up Block	
Sensitivity 300 mV, impedance 47 kilohms	o op sour i or op stoot	
MC 1, 2 (phono jack) (N300K):	SECTION 4. MECHANICAL ADJUSTMENTS.	10
Sensitivity 1 mV, impedance		
10 kilohms	SECTION 5. ELECTRICAL ADJUSTMENTS	
Outputs	DECK Section	
PHONES (phono jack):	TUNER Section	
accept headphones of 8 ohms or more. SPEAKER:	CD Section	15
accept impedance of 6 to 16 ohms.	SECTION & DIACRANO	
SURROUND SPEAKER:	SECTION 6. DIAGRAMS	
(AEP, EE CIS models)	6-1. Block Diagram — Tuner Section — (N300 mo	
Accept impedance of 16 ohms.	6-2. Block Diagram — Tuner Section — (N300K m 6-3. Block Diagram — Deck Section —	,
(SP, MY models)	6-4. Block Diagram — CD Section —	
Accept impedance of 16 ohms.	6-5. Block Diagram — Main Section —	
(Other models) Accept impedance of 8 to 16 ohms.	6-6. Circuit Boards Location	
recept impedance of o to 10 onnis.	6-7. Semiconductor Lead Layouts	
Supplied accessories	6-8. Printed Wiring Board — Main Section —	
AM loop aerial (1)	6-9. Schematic Diagram — Main Section —	
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Power consumption 105W	6-20. IC Pin Functions — Panel Section —	
Dimensions	IC608 Graphic Control (CXP82612-006Q/009 IC Bin Functions	
Approx. 355 × 425 × 355 mm (w/h/d)	IC Pin Functions	
incl. projecting parts and controls	6-21. Printed Wiring Board — CD Section — 6-22. Schematic Diagram — CD Section —	
Mass Approx. 8.3 kg (N300)	6-23. IC Block Diagrams — CD Section —	
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vithout notice.	 IC1051 Master Control (TMP87CP64F-6254) 	77
Abbreviation		
EE : East European model	SECTION 7. EXPLODED VIEWS	
MY : Malaysia model	7-1. Case Section	
SP : Singapole model	7-2. Chassis Section	
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SAFETY-RELATED COMPONENT WARNING !! COMPONENTS IDENTIFIED BY MARK & OR DOTTED	7-4. TC Mechanism Section 1 (TCM-220WR2)	
INE WITH MARK & ON THE SCHEMATIC DIAGRAMS	7-5. TC Mechanism Section 2 (TCM-220WR2) 7-6. TC Mechanism Section 3 (TCM-220WR2)	
AND IN THE PARTS LIST ARE CRITICAL TO SAFE DPERATION. REPLACE THESE COMPONENTS WITH	7-6. TO Mechanism Section 3 (TCM-220WH2) 7-7. CD Mechanism Section (CDM14-5BD19)	
/ -ualion reflace incoe components with		
	/-8. Base Unit Section (BU-5BD19)	87
SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.	7-8. Base Unit Section (BU-5BD19)	87

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.



This appliance is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

CAUTION	; INVISIBLE LASER RADIATION WHEN OPEN AVOID EXPOSURE TO BEAM
ADVARSEL	USYNLIG LASERSTRALING VED ABNIBO NAR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGA UDS ÆTTELSE FOR STRALING
VARO!	; AVATTAESSA JA SUOJALUKITUS OHITETTAESSA DLET ALTTIINA LASERSATERYLLI.
VARNING	LASERSTRALING NAR DENNA DEL AR OPPNAD OCH SPARREN AR URXOPPLAD
ADVARSEL	; USYNLIG LASERSTRALING NAR DEKSEL APNES UNNGA EKSPONERING FOR STRALEN

This caution label is located inside the unit.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

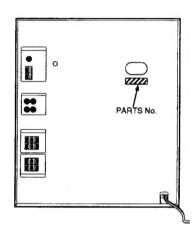
Notes on chip component replacement

- · Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

MODEL IDENTIFICATION — BACK PANEL —



	PARTS NO.
N300 : AEP 2 Model	4-969-783-1□
N300 : AEP 1 Model (made in malaysia)	4-969-783-2□
N300 : AEP 1 Model (made in indonesia)	4-969-783-3□
N300 : German Model	4-969-783-4□
N300 : Italian Model	4-969-783-5□
N300 : East European Model	4-969-783-6□
N300 : CIS Model	4-969-783-7□
N300 : UK Model	4-969-783-8□
N300K : Saudi Arabia Model	4-970-162-0□
N300K : E Model	4-970-162-1
N300K : Malaysia Model	4-970-162-2□
N300K : Singapore Model	4-970-162-3□

SECTION 1 SERVICING NOTE

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

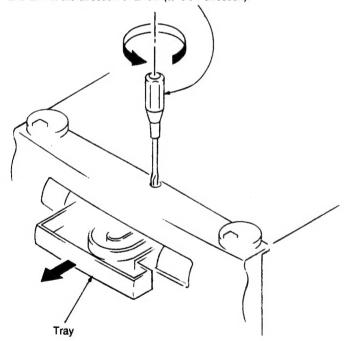
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

HOW TO OPEN THE DISC TRAY WHEN POWER SWITCH TURNS OFF

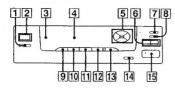
Insert a tapering driver into the aperture of the unit bottom, and turn in the direction of arrow (to OUT direction).



* To close the disc tray, turn the driver in the reverse direction (to IN direction).

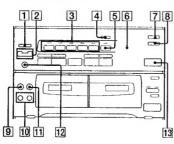
Front Panel

Tuner section



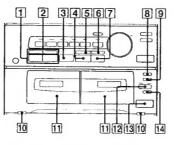
- 1 SLEEP button (19)
- 2 SYSTEM POWER switch (20)
- 3 Remote sensor
- 4 Display window (25)
- 5 CURSOR CONTROL buttons (6, 18, 19, 20)
- 6 TUNING (+/-) buttons (10, 20)
- 7 TUNING MEMORY button (11)
- 8 TUNING MODE button (10, 20)
- 9 TIMER SET button (19)
- 10 DAILY button (19)
- 11 REC button (20)
- 12 CLOCK SET button (6) 13 ENTER/NEXT button (6, 19)
- 14 DISPLAY button (6, 8, 18)
- 15 TUNER/BAND button (10, 15)

Amplifier section



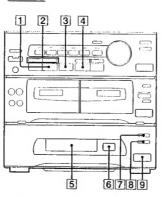
- 1 KARAOKE PON/MPX button (21) (N300K)
- 2 KEY CONTOL buttons (21) (N300K)
- 3 Preset equalizer setting buttons (17)
- 4 EQ MEMORY button (18)
- 5 P.FILE button (18)
- 6 VOLUME control (7, 17, 20)
- 7 DBFB button (17)
- 8 SURROUND button (18)
- MIC LEVEL Control (20) (N300K)
- 10 MIC 1, 2 jacks (20) (N300K)
- 11 ECHO LEVEL Control (20) (N300K)
- 12 PHONES jack (17, 21)
- 13 FUNCTION button (9, 12, 20)

Tape player section



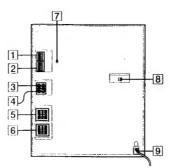
- 1 (front side play)
- (reverse side play) buttons (12)
- 2 >> (fast rightward)
- ◄ (fast leftward) buttons (12)
- 3 (stop) button (12)
- 4 III (pause) button (deck B only) (12)
- [5] HIGH SPEED DUBBING button (16)
- 6 CD SYNCRO button (13)
- 7 REC button (deck B only) (13)
- 8 DIRECTION MODE button (12)
- 9 DOLBY NR selector (12)
- 10 EIECT button (12)
- 11 Cassette compartments (12)
- 12 DECK SELECT button (12)
- 13 TAPE button (12)
- 14 TAPE REWIND button (12)

CD player



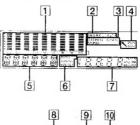
- 1 > (play) button (7)
- Idddd/▶▶DDI (AMS) buttons (7)
- (stop) button (7, 20)
- 4 III (pause) button (7) 5 Disc tray (7)
- 6 △ OPEN/CLOSE button (7, 14)
- 7 PLAY MODE button (8)
- 8 REPEAT button (9)
- 9 CD button (8, 14)

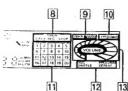
Rear Panel



- [1] EM 75Ω terminal (4)
- 2 AM terminal (4)
- [3] PHONO IN Jacks (4)
- 4 VIDFO IN jacks (20)
- [5] SPEAKER connectors (4)
- 6 SURROUND SPEAKER connectors (1, 20)
- [7] A ground terminal (4)
- 8 VOLTAGE SELECTOR* (5)
- 9 AC power cord (5)
- Except for Malaysian model

Display Window

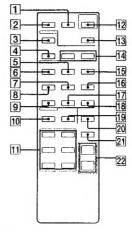




- [1] Spectrum analyzer (18)
- [2] Tape direction indications (12)
- [3] Tuner indication (10)
- [4] KARAOKE indication (21)
- [5] Band/disc/track indications (7, 10, 14, 18, 19)
- [6] AUTO/TUNING/PRESET/STEP indication (10)
- [7] Frequency/playing time indications (6, 7, 12, 14, 18, 20)
- [8] TIMER DAILY/REC/SLEEP indications (19)

- 9 DBFB indication (17)
- [10] SURROUND indication (18)
- [1] Music calendar (7)
- 12 CD play mode indication (7)
- 13 VOLUME indication (7)

Remote



- 1 DISPLAY button (6)
- 2 FUNCTION button (9)
- 3 BAND button (10, 15) 4 STEREO/MONO button (10)
- 5 REPEAT button (9)
- [6] CD PLAY button (9)
- [7] SHUFFLE button (8)
- 8 CONTINUE button (7)
- [9] CHECK button (9)
- [10] TAPE PLAY button (12)
- [1] CD/TAPE operating buttons
 - **◄** ► (play) (8, 12)
- ◄ (fast leftward)/
- ►► (fast rightward) (12)
- Idd /▶►I AMS*(8)
- 11 (pause) (8, 12)
- (stop) (8, 12)
- * AMS: Automatic Music Sensor.
- [12] SYSTEM POWER button (8)
- 13 SLEEP button (19)
- 14 PRESET (+/-) buttons (10, 20)
- 15 DISC SKIP button (You cannot use this
- button with this model) [16] PROGRAM button (9)
- 17 CLEAR button (9)
- 18 EDIT button (14)
- 19 DECK SELECT button (12) 20 PRESET EQ button (17)
- 21 P.FILE button (18)
- 22 VOL (volume) buttons (7, 17, 20)

from instruction manual.

GENERAL

ECTION

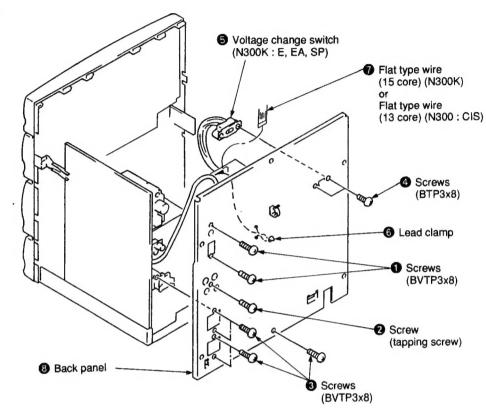
SECTION 3 DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

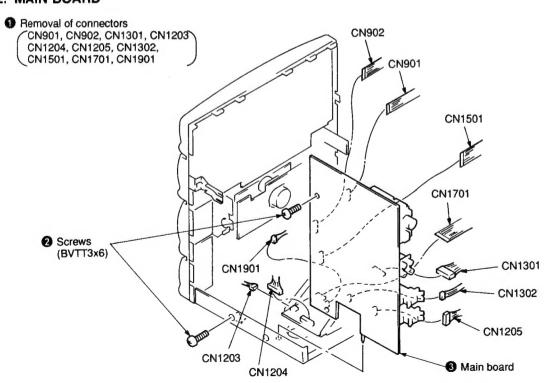
3-1. BACK PANEL

Abbreviations

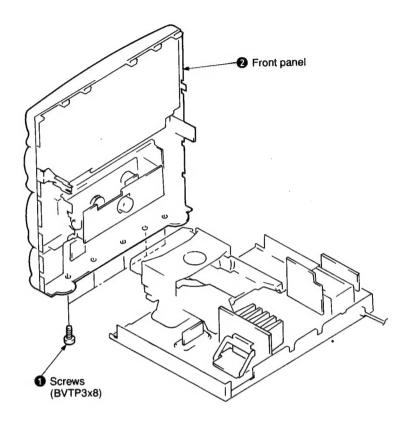
EA : Saudi Arabia model. SP : Singapore model.



3-2. MAIN BOARD

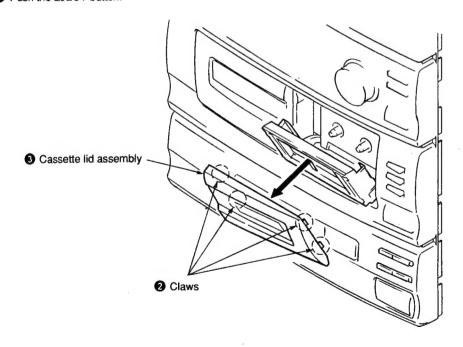


3-3. FRONT PANEL

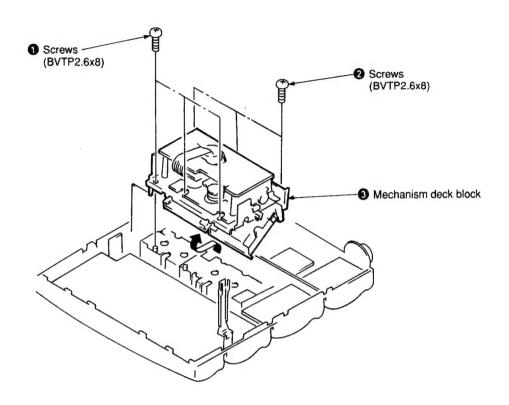


3-4. CASSETTE LID ASSEMBLY

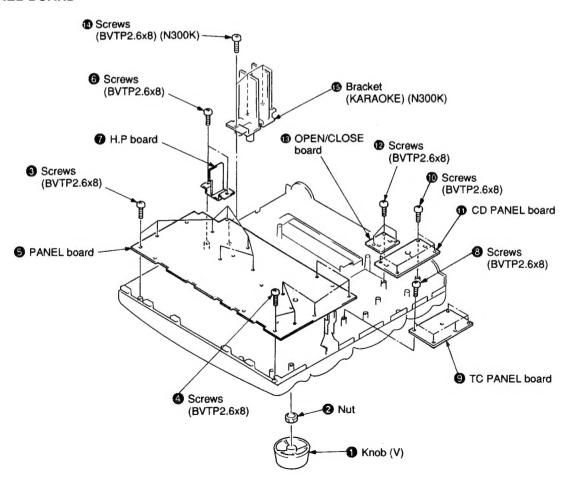
1 Push the EJECT button.



3-5. MECHANISM DECK BLOCK



3-6. PANEL BOARD

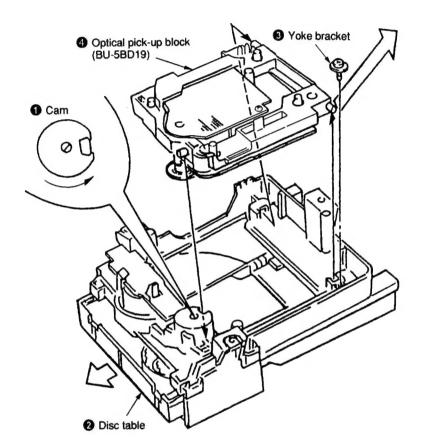


3-7. OPTICAL PICK-UP BLOCK

- 1 Turn the cam to the direction of arrow (Counter clokwise) by minus screw driver.

 2 Take off the disc table.

- 3 Remove the yoke bracket.
 4 Remove the optical pick-up block (BU-5BD19) to the direction of arrow.



SECTION 4 MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured alcoholmoistened swab:

> record/playback heads erase head

pinch rollers rubber belts idlers

capstan

2. Demagnetize the record/playback head with a head demagnetizer.

Do not use a magnetized screwdriver for the adjustments.

After the adjustments, apply suitable locking compound to the parts adjusted.

The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Mesurement

Torque	Torque meter	Meter reading
FWD	CQ-102C	36 to 61g • cm
FWD back tension	CQ-102C	2 to 6g • cm
REV	CQ-102RC	36 to 61g • cm
REV back tension	CQ-102RC	2 to 6g • cm
FF/REW	CQ-201B	61 to 143g • cm
FWD tension	CQ-403A	1kg • cm or more
REV tension	CQ-403R	1kg • cm or more

SECTION 5 ELECTRICAL ADJUSTMENTS

DECK SECTION

0 dB=0.775V

- Demagnetize the record/playback head with a head damagnetizer. (Do not bring the head demagnetizer close to the erase head.)
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.
- The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
- 6. The adjustments should be performed for both L-CH and R-ch.
- 7. Switches and controls should be set as follows unless otherwise specified.

TAPE SELECT switch: TAPE I

DOLBY NR switch : OFF (Except E model)

Set to test mode. (Press key switch sometime DISPLAY), FUNCTION and POPS/2 button.)

Таре	Signal	Used for	
P-4-A100	10 kHz, -10 dB	Azimuth Adjustment	
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment	
P-4-L300	315 Hz, 0 dB	Level Adjustment	

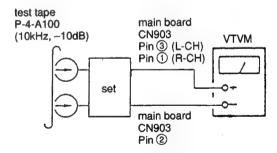
Record/Playback Head Azimuth Adjustment

DECK A DECK B

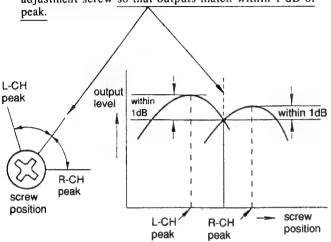
Note: Perform this adjustments for both decks.

Procedure:

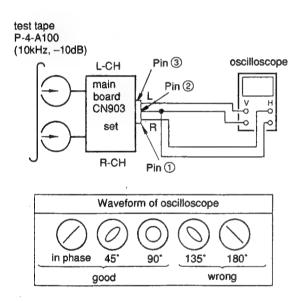
1. Mode: Playback (FWD)



Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1 dB of

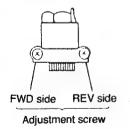


3. Mode: Playback (FWD)



- 4. Repeat steps 1 to 3 in playback (REV) mode.
- After the adjustments, apply suitable locking compound to the parts adjusted.

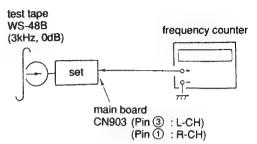
Adjustment Location: Record/Playback Head (Deck A and B)



Tape Speed Adjustment DECK A DECK B

Procedure:

Mode: Playback (FWD)



High speed adjustment

- 1. Press the HIGH SPEED DUBBING button in playback mode. Then at HIGH speed mode.
- 2. Adjust RV652 on the MD board so that the frequency counter reads $6,000 \pm 30$ Hz.

Normal speed adjustment

- 1. Set to the playback mode.
- 2. Adjust RV651 on the MD board so that the frequency counter reads $3,000 \pm 15$ Hz.

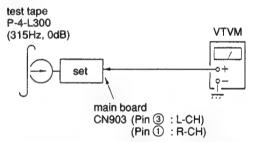
Frequency difference between deck A and deck B the beginning of the tape should be within $\pm 1.5\%$.

Adjustment Location: MD board

Playback Level Adjustment DECK A DECK B

Procedure:

Mode: Playback (FWD)



Deck A side RV311 (L-CH), RV411 (R-CH) on the MD board Deck B side RV301 (L-CH), RV401 (R-CH) on the MD board so that the limits below are satisfied.

Adjustable limits:

CN903 PB level: 301.5 to 338.3 mV (-8.2 to -7.2 dB) level difference between the channels: within $\pm 0.5~\text{dB}$

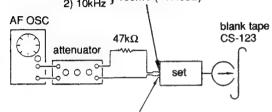
Adjust Location: MD and main boards

Record Bias Current Adjustment DECK B

Procedure:

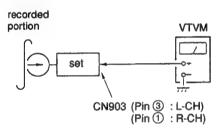
1. Mode: record

Pin 6 (L-CH) of IC901 on the main board. Pin (R-CH) of IC901 on the main board. 1) 315Hz } 100mV (-17.8dB) 2) 10kHz



Pin ② (GND) of CN903 on the main board.

2. Mode: Playback



Confirm playback the signal recorded in step 1 become adjustable limits as follows.

If these levels do not adjustable limits, adjustment the RV341 (L-CH) and RV441 (R-CH) on the MD board to repeat steps 1

Adjustable limits: Playback output of 315 Hz to playback

output of 10 kHz: 0±0.5 dB

Adjustment Location: MD and main boards

Record Level Adjustment DECK B

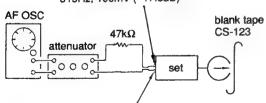
Setting:

TAPE SELECT switch: TYPE I

Procedure:

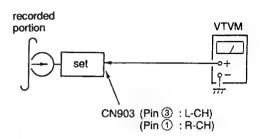
Mode: record

Pin 6 (L-CH) of IC901 on the main board. Pin (R-CH) of IC901 on the main board. 315Hz, 100mV (-17.8dB)



Pin @ (GND) of CN903 on the main board.

2. Mode: Playback



Confirm playback the signal recorded in step 1 become adjustable limits as follows.

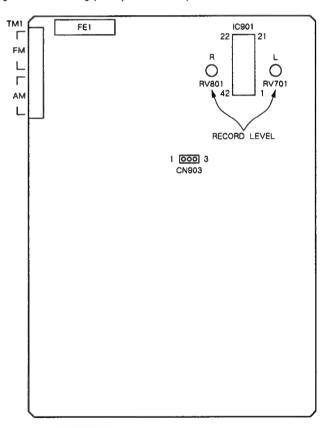
If these levels do not adjustable limits, adjustment the RV701 (L-CH) and RV801 (R-CH) on the main board to repeat steps 1 and 2.

Adjustable limits:

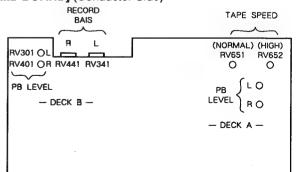
CN903 PB level: 47.3 to 53.1 mV (-24.3 to -23.3 dB)

Adjustment Location: main board

[MAIN BOARD] (Component Side)



[MD BOARD] (Conductor Side)



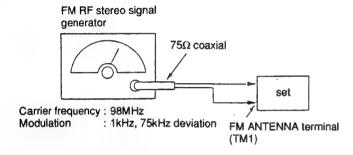
TUNER SECTION

0dB=1μV

Note: As a front-end (FE1) is difficult to repair if faulty, replace it with new one.

FM Section Adjustment

Setting:



FM Tuned Level Adjustment

Band: FM

Procedure:

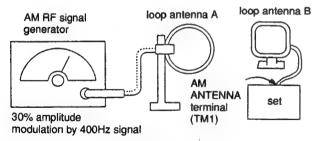
- Supply a 17.8 μV (25dBμ) 98 MHz signal from the ANTENNA terminal.
- 2. Tune the set to 98 MHz.
- 3. Adjust RV2 so that the TUNED indicator goes on.

Adjustment Location: main board

 Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by trimmer capacitors.

AM Section Adjustment

Setting:



AM Tuner Level Adjustment

Band: AM

Procedure

- Set loop antenna A so that the loop antenna B input level becomes 316 μV (50 dBμ).
- 2. Tune the set to 1050kHz.
- 3. Adjust RV1 so that the TUNED indicator goes on.

Adjustment Location: main board

SW OSC Voltage Adjustment

(Saudi Arabia Model Only) BAND SELECT: SW

Procedure:

- 1. Connect the VOM to JW11.
- 2. Tune the set to 5.95MHz.
- 3. Adjust T2 for 0.9 to 1.1V reading on the VOM.
- 4. Tune the set to 17.90MHz.
- 5. Adjust CT2 for 8.3 to 8.7V reading on the VOM.

SW Tracking Adjustment

(Saudi Arabia Model Only) BAND SELECT: SW

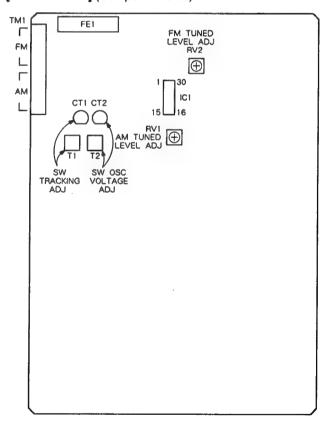
Procedure:

- 1. Connect the VOM to speaker terminal.
- 2. Adjust for a maximum reading on VOM.

Signal generator and Set frequency	Adjustment part	
7.0MHz	T1	
17.0MHz	CT1	

Adjustment Location: main board

[MAIN BOARD] (Component Side)



SUBCARRIER ADJUSTMENT (CIS Model only)

SWITO		Function Selector : TUNER Band Selector : FM STEREO/MONO : MONO			
SIGNA GENE	AL RATOR	69 MHz, 60 dB, FM modulated (MONO SIGNAL)			SIGNAL)
STEP	TEST STAGE	FM TUNING FREQUENCY	SIGNAL GENERA- TOR	AD- JUST- MENT	REMARKS
1	fo	69 MHz	1 kHz (10 kHz dev.)		The value in this state should be 0 dB (Vo).
2			31.25 kHz (10 kHz dev.)	L1701	Adjust for maximal output.
3	Q			RV1701	Indication is +14 dB against Vo.

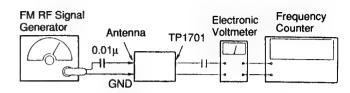


Fig. 1 SUBCARRIER

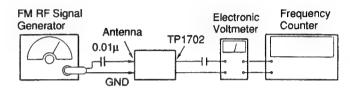


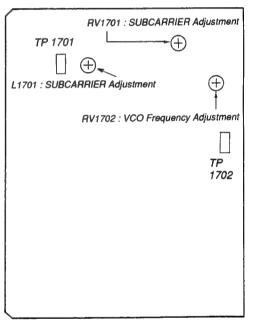
Fig. 2 VCO FREQUENCY

VCO FREQUENCY ADJUSTMENT

SWITCH POSITION	STEREO/MONO : STEREO			
SIGNAL GENERATOR	69 MHz, 60 dB, FM modulated (MONO SIGNAL)			
	FM TUNING ADJUSTMENT FREQUENCY		REMARKS	
	69 MHz	RV1702	Adjust for 31.25 kHz ± 50 Hz.	

Adjustment Location: Polar board

[POLAR BOARD] (Component Side)

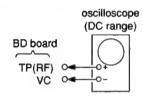


CD SECTION

Note:

- CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
- Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
- 3. Use an oscilloscope with more than $10M\Omega$ impedance.
- Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.
- Adjust the focus bias adjustment when optical block is replaced.

Focus Bias Adjustment

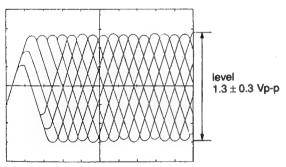


Procedure:

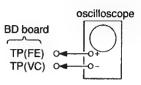
- Connect oscilloscope to test point TP (RF). (GND terminal: VC)
- 2. Turned Power switch on.
- 3. Put disc (YEDS-18) in and playback.
- Adjust RV101 so that the waveform is clear.
 (Clear RF signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.)
- 5. After adjustment, check the RF signal level.

• RF signal

VOLT/DIV: 200 mV TIME/DIV: 500 nS



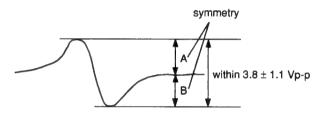
S Curve Check



Procedure:

- 1. Connect oscilloscope to test point TP (FEO).
- Connect between test point TP (FOK) and GND by lead wire.
- 3. Turn Power switch on.
- Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out.)
- Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 3.8±1.1 Vp-p.

S-curve waveform

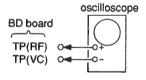


6. After check, remove the lead wire connected in step 2.

Note: • Try to measure several times to make sure than the ratio of A: B or B: A is more than 10: 7.

 Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check



Procedure:

- 1. Connect oscilloscope to test point TP (RF) on BD board.
- 2. Turned Power switch on.
- 3. Put disc (YEDS-18) in and playback.
- Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note:

Clear RF signal waveform means that the shape " \Diamond " can be clearly distinguished at the center of the waveform.

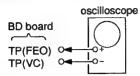
RF signal waveform



VOLT/DIV: 200mV TIME/DIV: 500nS

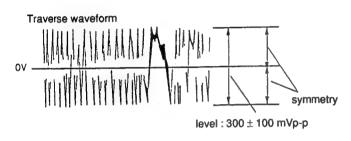
level: 1.3 ± 0.3 Vp-p

E-F Balance Check



Procedure:

- 1. Connect pin 66 of IC101 to GND with a lead wire.
- 2. Connect oscilloscpe to test point TP (TEO).
- 3. Turned Power switch on.
- 4. Put disc (YEDS-18) in and playback.
- 5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0Vdc, and check this level.



6. Remove the lead wire connected in step 1.

Focus/Tracking Gain Adjustment (RV102, RV103)

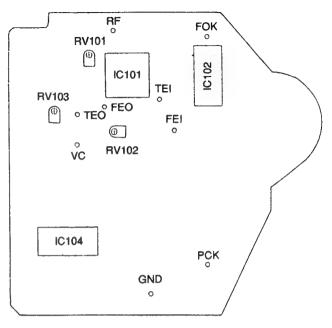
This gain has a margin, so even if it is slightly off. There is no problem.

Therfore, do not perform this adjustment.

Please note that it should be fixed to mechanical center position when you moved and do not know original position.

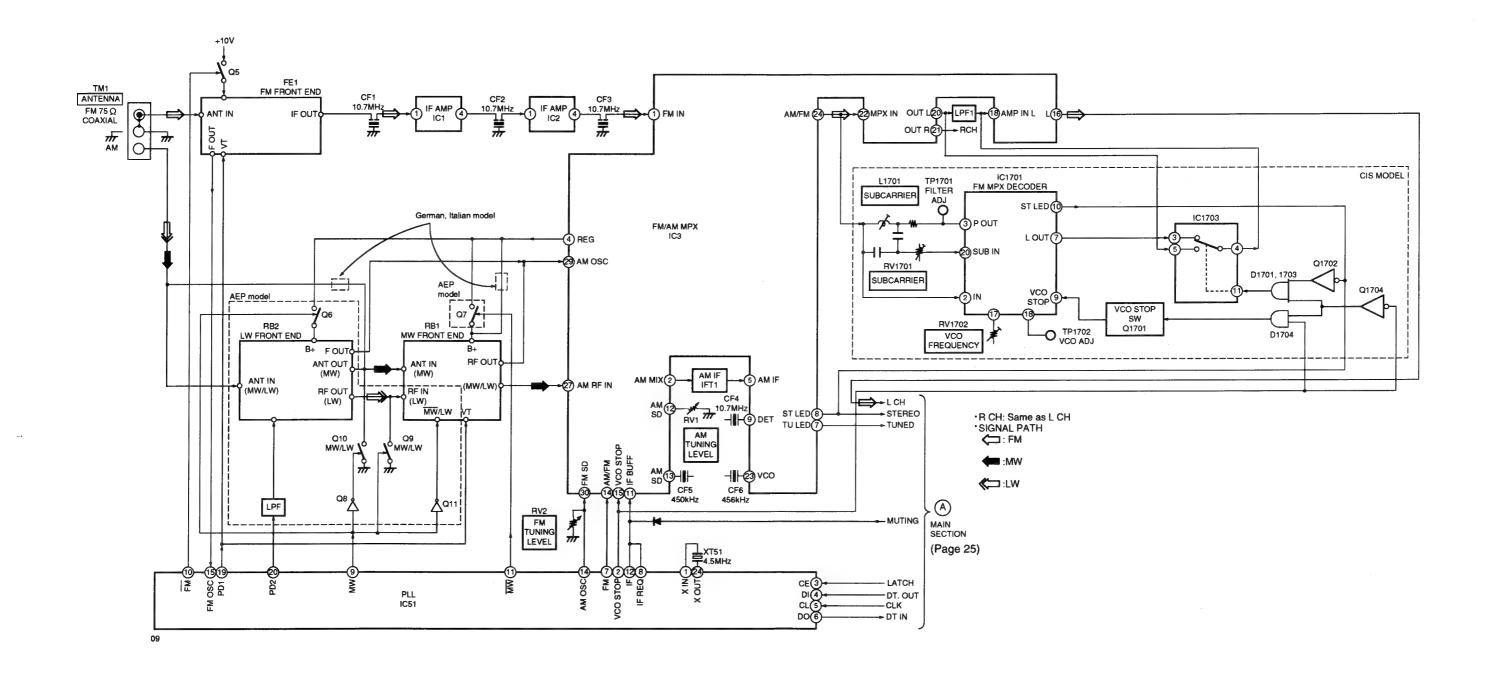
Adjustment Location:

[BD BOARD] (Conductor Side)

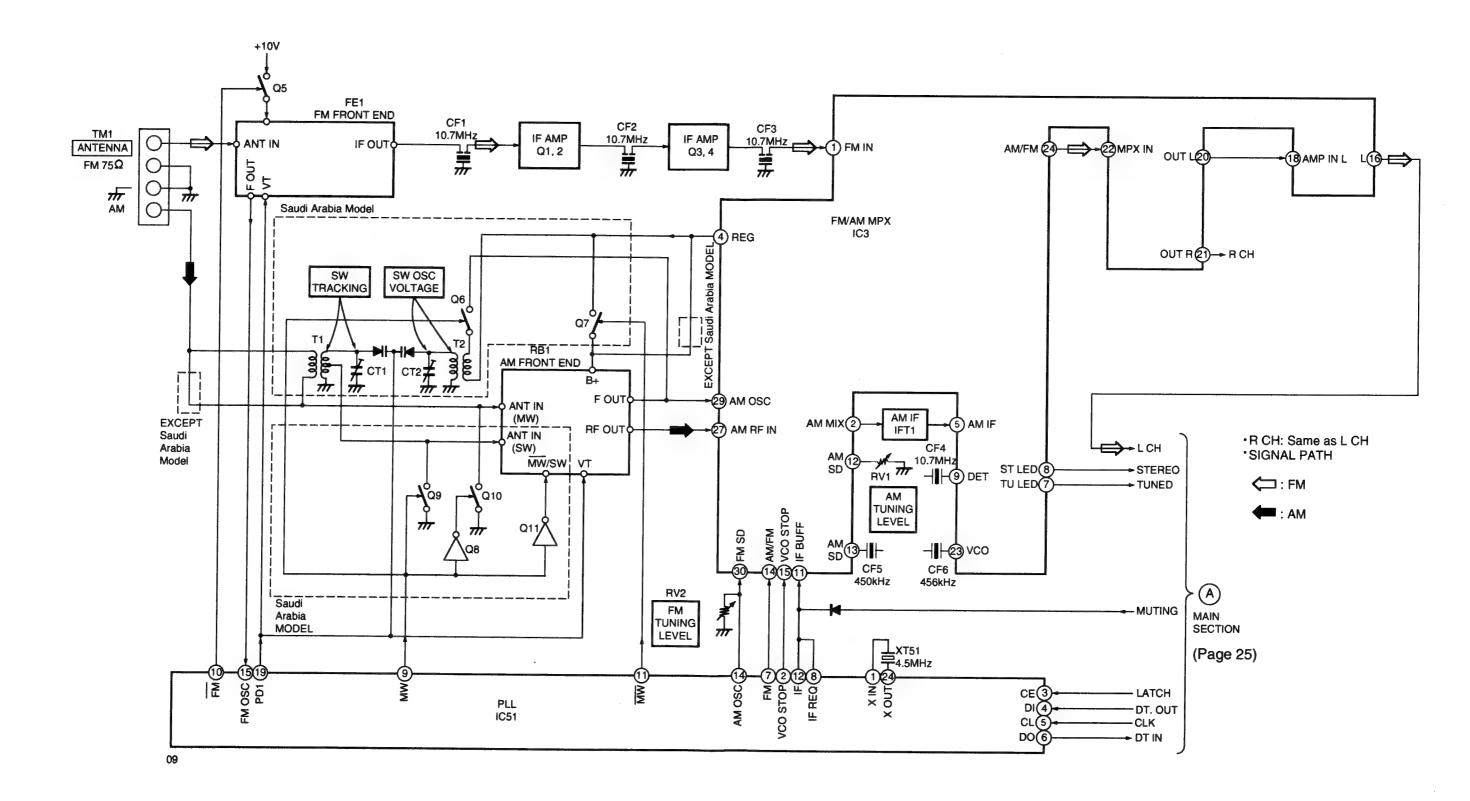


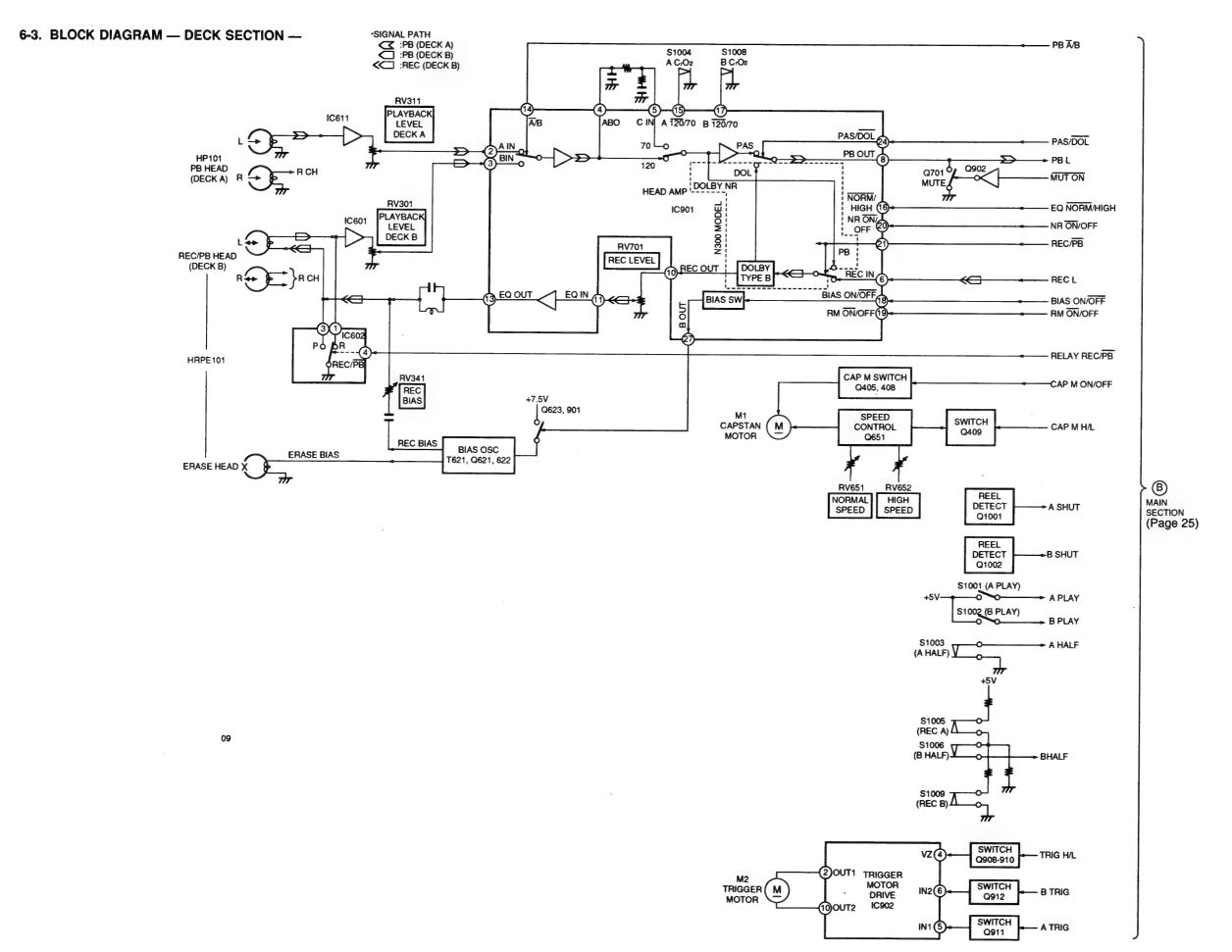
SECTION 6 DIAGRAMS

6-1. BLOCK DIAGRAM — TUNER SECTION — (N300 model)

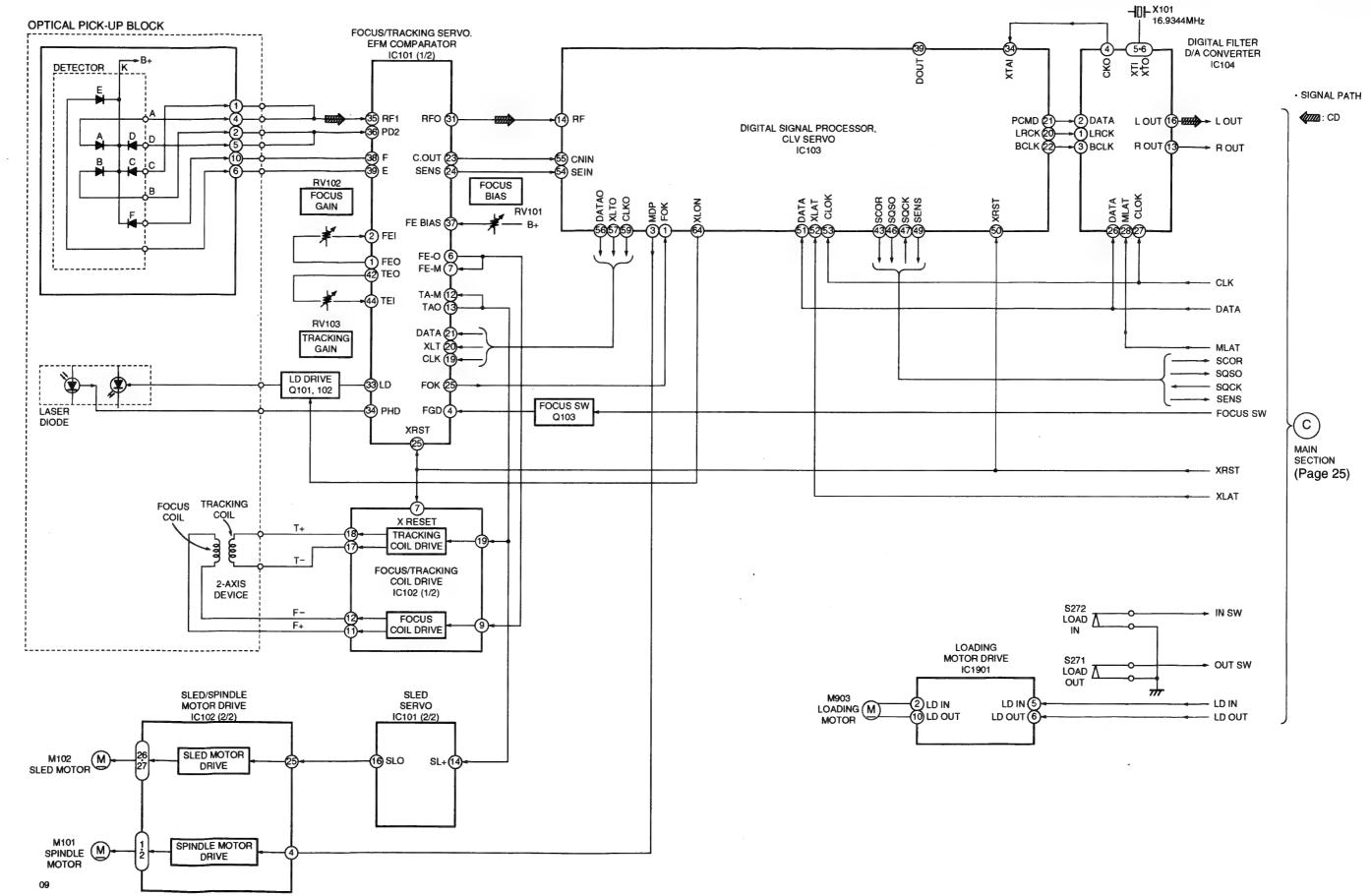


6-2. BLOCK DIAGRAM — TUNER SECTION — (N300K model)



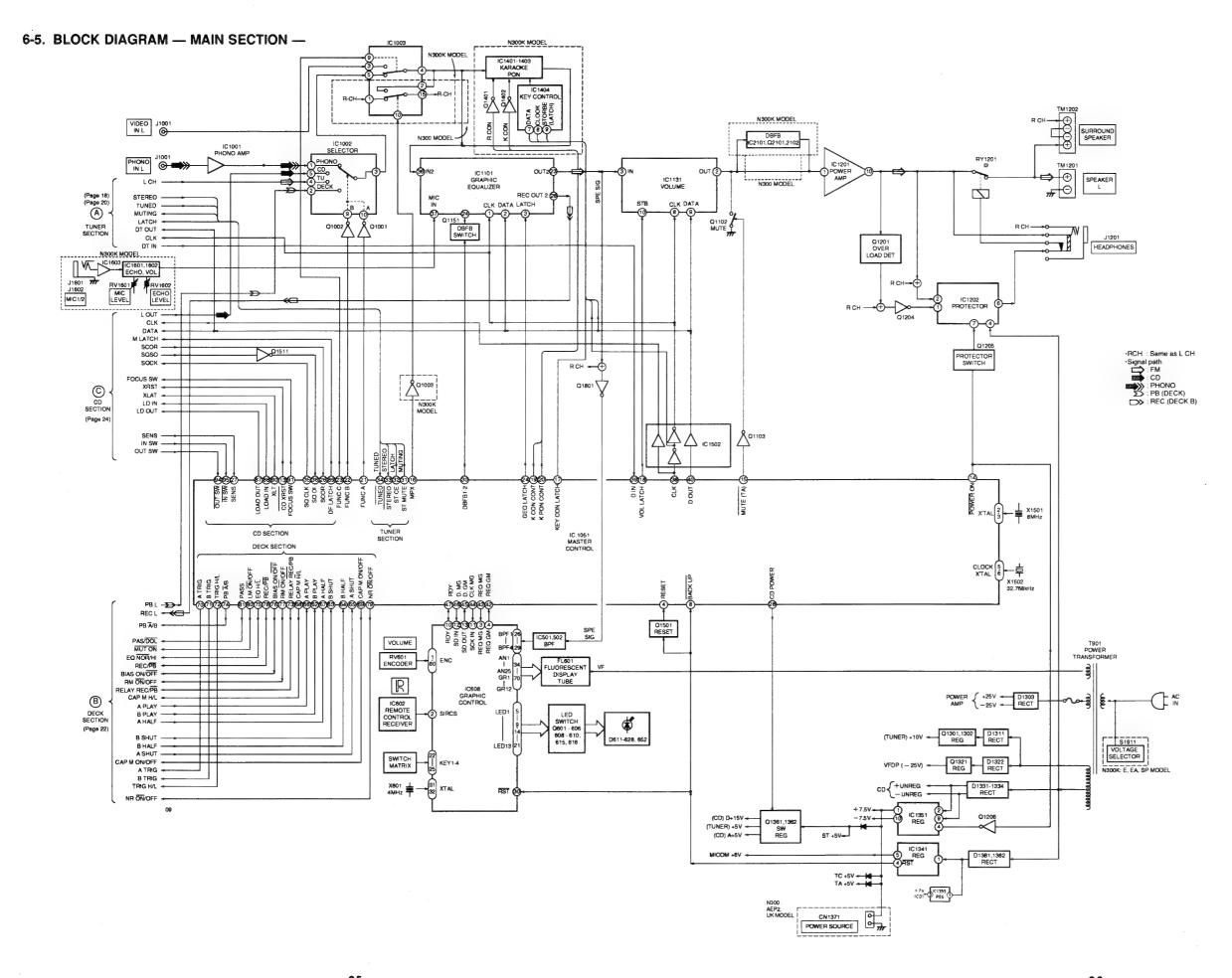


6-4. BLOCK DIAGRAM — CD SECTION —

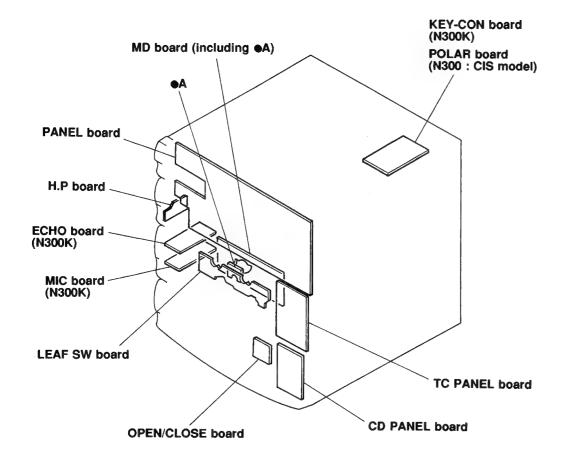


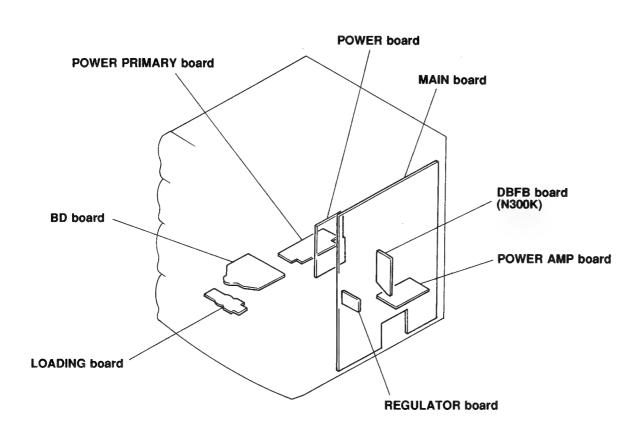
ECH(

LEA

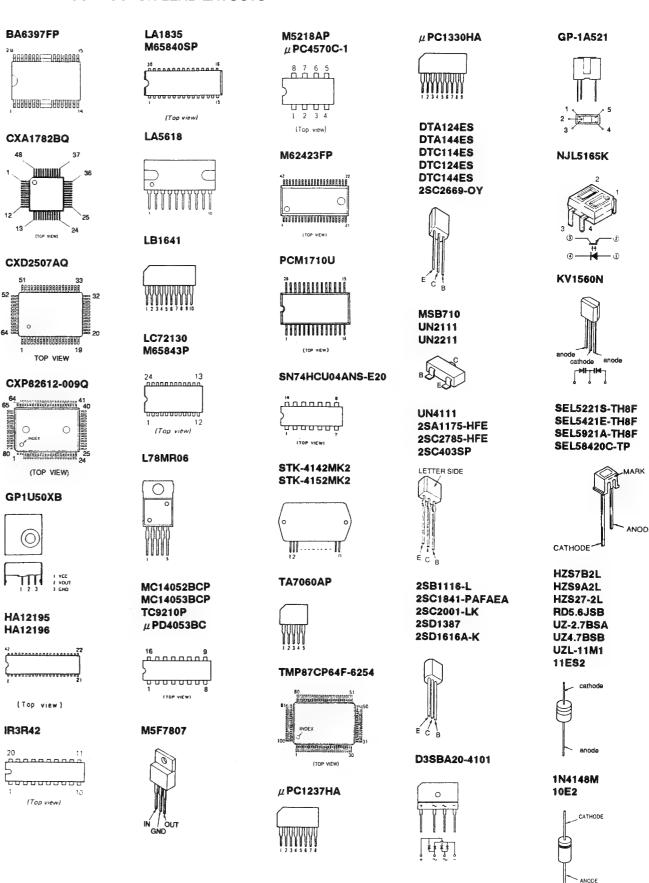


6-6. CIRCUIT BOARDS LOCATION

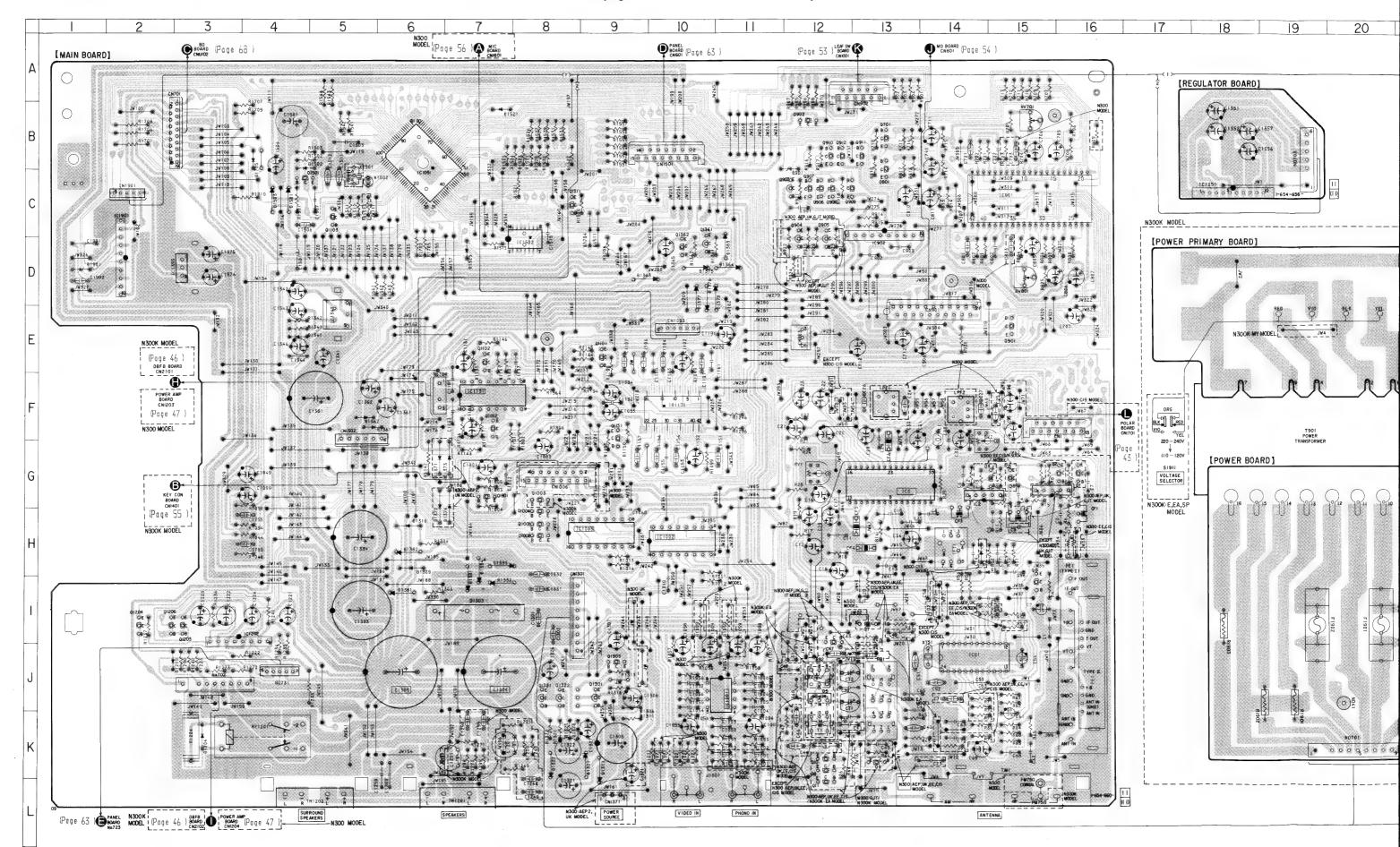


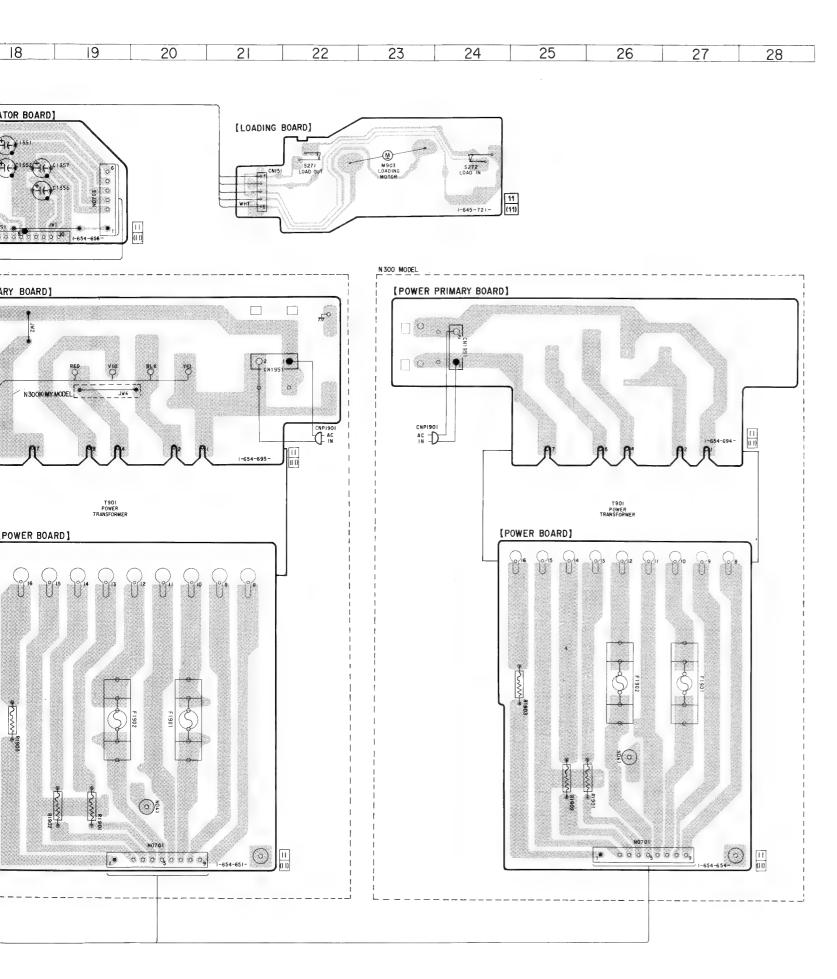


6-7. SEMICONDUCTOR LEAD LAYOUTS



6-8. PRINTED WIRING BOARD — MAIN SECTION — • See page 27 for Circuit Boards Location. • See page 28 for Semiconductor Lead Layouts.





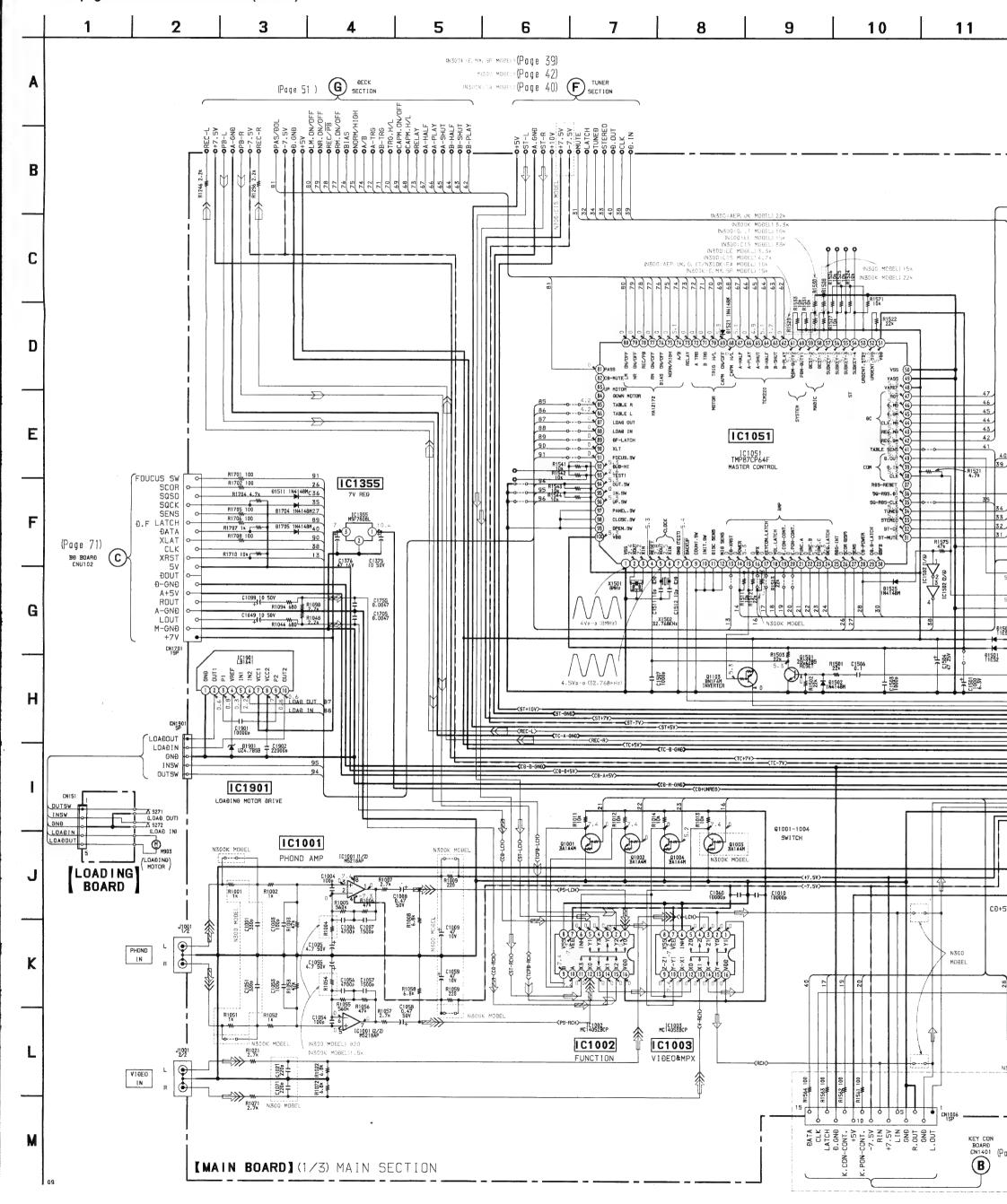
Semiconductor Location

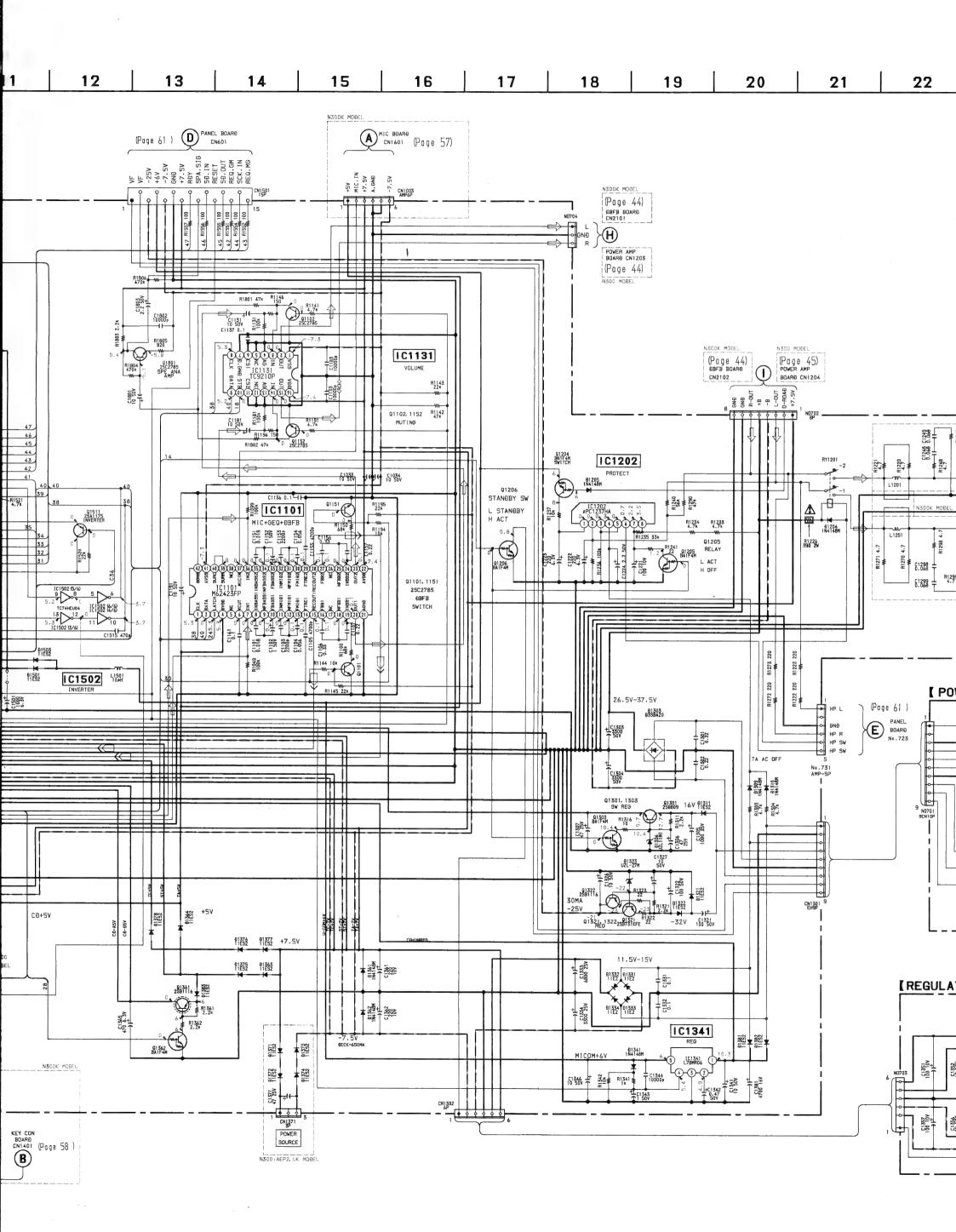
	Location	Ref. No.	Location
D1 D2 D3 D5 D901 D1204 D1205 D1303	H-14 I-14 H-14 J-12 C-12 K-3 J-2 I-7	IC1101 IC1131 IC1202 IC1341 IC1355 IC1502 IC1901	F-10 F-7 J-4 E-5 D-3 D-8 D-2
D1306 D1309 D1310 D1311 D1321 D1322 D1323 D1331 D1332 D1333	J-9 H-6 H-6 K-9 K-9 K-8 K-8 I-7	Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9	G-16 G-16 G-15 I-15 I-12 I-13 K-12 K-13 K-12
D1334 D1341 D1361 D1362 D1363 D1364 D1371 D1372 D1373 D1374 D1375 D1376 D1377	I-7 E-4 F-5 F-5 D-10 D-11 G-6 G-6 G-5 H-6 D-9 E-10	Q11 Q701 Q801 Q901 Q902 Q903 Q904 Q905 Q906 Q907 Q908 Q909 Q910	K-12 B-13 C-13 E-15 B-12 C-12 D-12 C-12 C-12 C-12 C-12 C-12 B-12
D1378 D1381 D1382 D1383 D1501 D1502 D1503 D1511 D1521 D1525 D1704 D1705 D1901	E-10 I-6 H-6 D-111 C-4 C-5 C-4 C-9 B-7 D-6 C-9 B-4 D-1	Q911 Q912 Q1001 Q1002 Q1003 Q1004 Q1101 Q1102 Q1103 Q1151 Q1152 Q1204 Q1205	B-13 B-12 H-8 H-8 H-8 E-9 F-7 C-5 G-9 G-7 I-2
IC1 IC2 IC3 IC51 IC901 IC902 IC1001 IC1002 IC1003 IC1051	G-16 G-14 G-13 J-14 C-15 D-13 J-11 H-10 H-9 C-6	Q1206 Q1301 Q1303 Q1321 Q1322 Q1361 Q1362 Q1501 Q1511 Q1801	J-9 J-9 J-8 J-8 D-10 D-10 C-4 C-8 H-7

- : parts mounted on the conductor side.
- \(\Delta \) : internal component.
 \(\text{Pattern from the side which enable seeing.} \)
- Abbreviation
- G : German model.

 IT : Italian model.
- IT : Italian model.
 EE : East European model.
 EA : Saudi Arabia model.
 SP : Singapore model.
 MY : Malaysia model.

- 6-9. SCHEMATIC DIAGRAM MAIN SECTION —
 See page 75 for IC Block Diagrams. (IC1002, 1003, 1101, 1131, 1202, 1351, 1901)
 - See page 77 for IC Pin Functions. (IC1051)





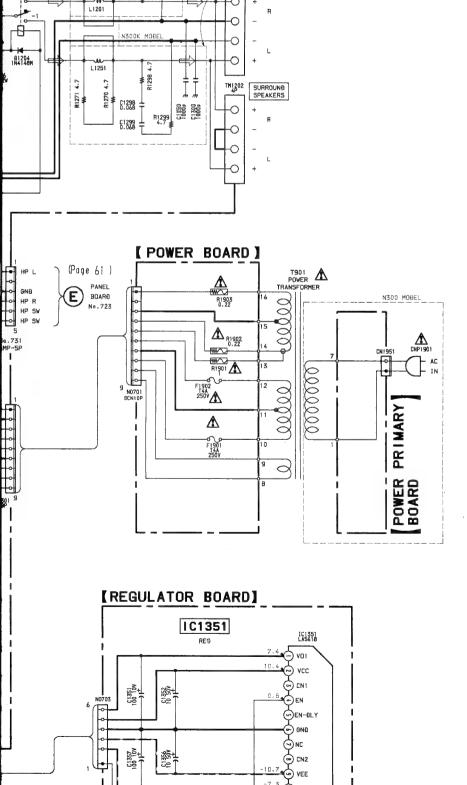
22 21 23 24 25 26 27 **28** 29

NOTE

- All resistors are in Ω and 1/4W or less unless otherwise under no-signal (deturned) conditions. specified.
- \(\sigma \) :internal component.
- tusible resistor.
- _____:panel designation.

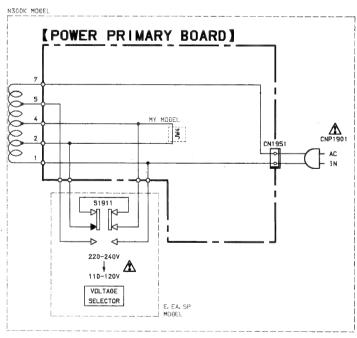
Note:The components identified by mark 🛧 or dotted line with mark \Lambda are critical for safety. Replace only with part number specified.

- Voltages and waveforms are do with respect to ground no mark:FM
- Voltages are taken with a VDM ([nput impedance $10M\Omega$). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a ascillascope. Voltage variations may be noted due to normal production tolerances.
- Abbreviation G :German model. IT : Italian model. EE :East European model. EA :Saudi Arabia model. SP :Singapore model. MY :Malaysia model. AEP2: AEP model with power source for PS-LX56P.
- Signal path. :FM ⇒ :PB (ĐECK) >> :REC (DECK B) ED: :PHONO

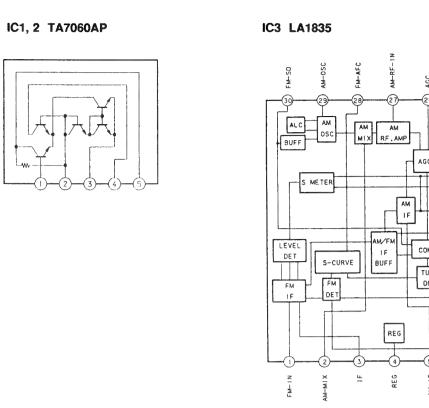


H1249

SPEAKERS



• IC Block Diagrams.



ANTENNA

FM75 ₽

A

В

C

D

Ε

F

G

Н

NOTE

• All capaci

50WV or le

and tantal

• All resist

specified.

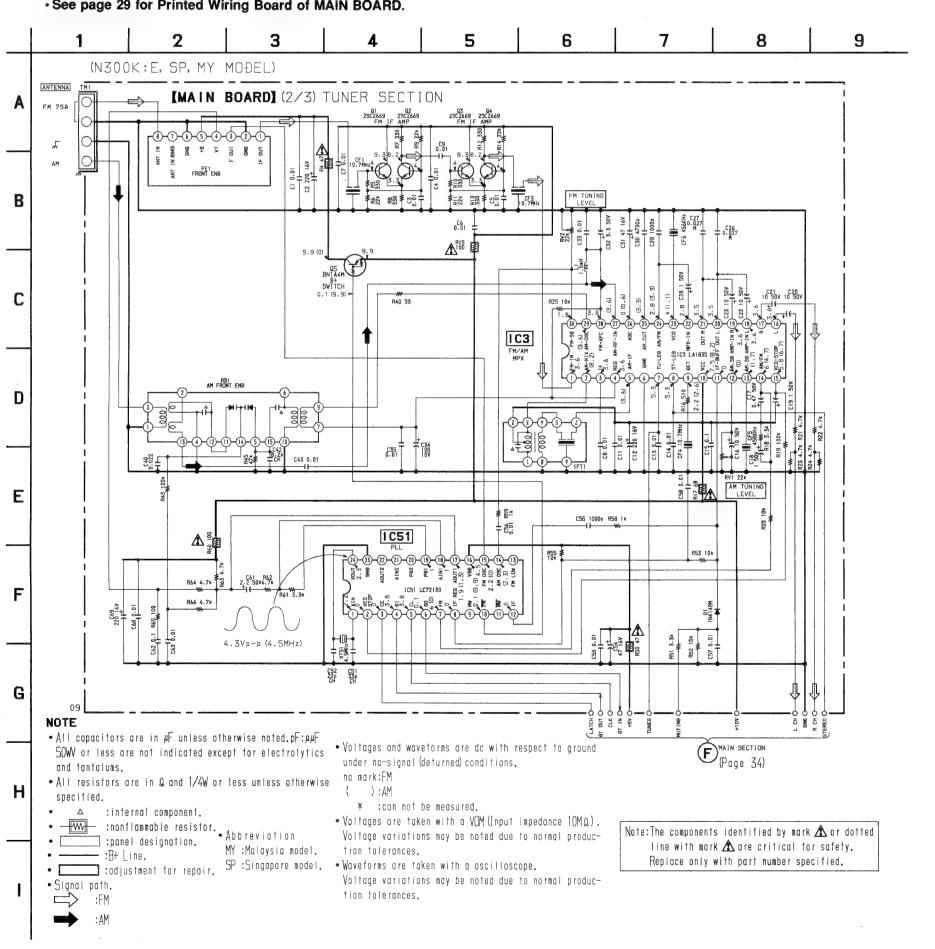
Δ

Note:The c

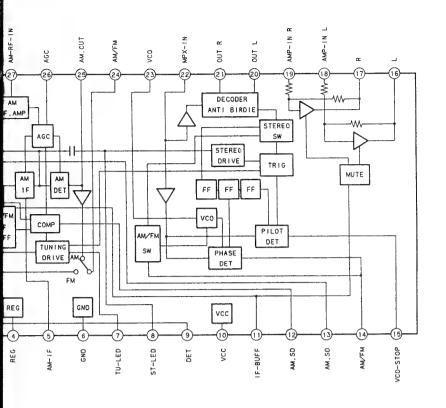
line

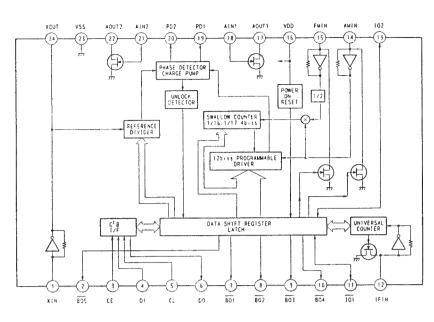
Repla

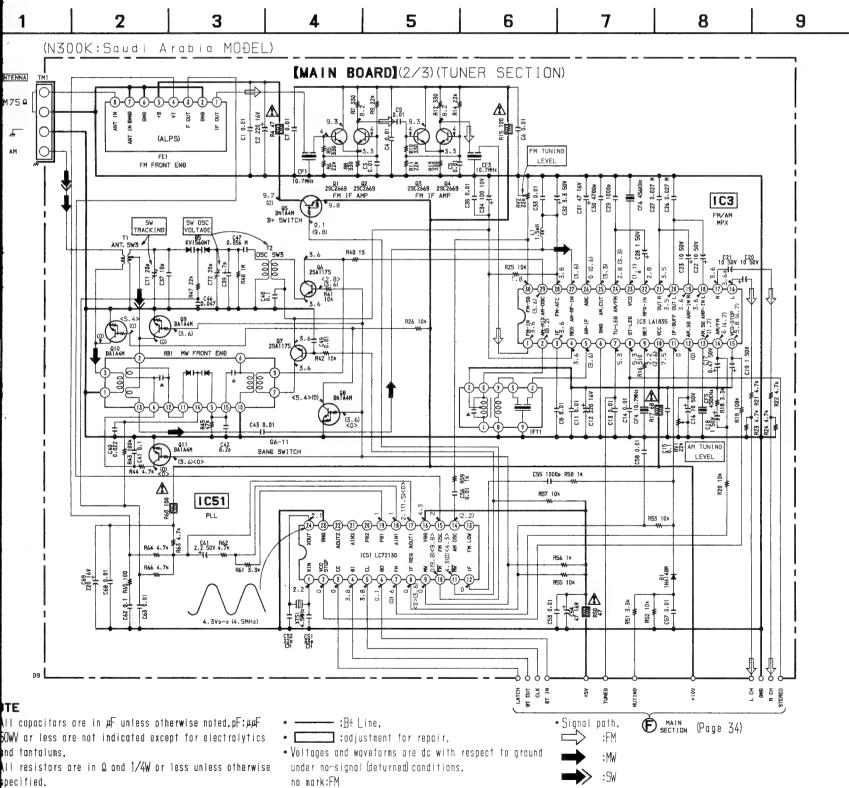
6-10. SCHEMATIC DIAGRAM — TUNER SECTION — • See page 29 for Printed Wiring Board of MAIN BOARD.



IC51 LC72130







(N300 MOĐEL) ANTENNA FM 750 CDAXIAL В C D E F G NOTE 09 • All capacitors are in μF unless otherwise 50WV or less are not indicated except for and tantalums. • All resistors are in Ω and 1/4W or less uspecified. A :internal component.
inonflammable resistor.
:ponel designation. Note:The components identified by mark 🛦 line with mark \Lambda are critical for so Replace only with part number specifi

Replace only with part number specified.

tote:The components identified by mark 🛧 or dotted

line with mark \Lambda are critical for safety.

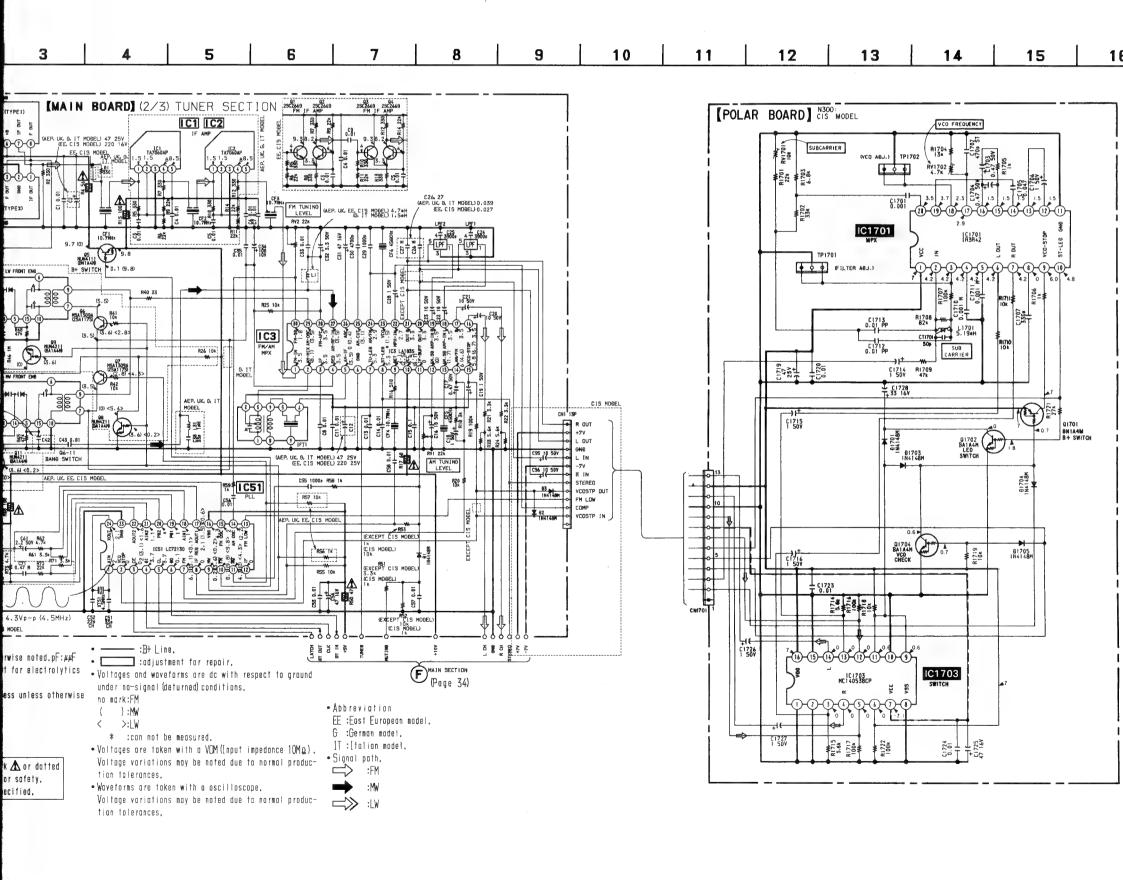
△ :internal component. :nonflammable resistor.

🗌 :panel designation.

no mark:FM ():MW

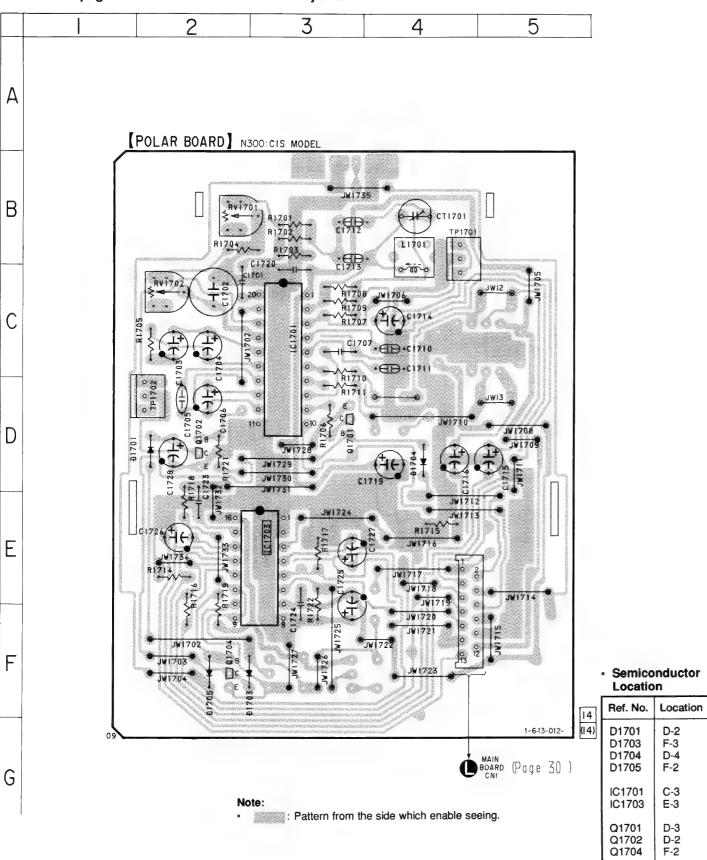
• Voltages are taken with a VOM (Input impedance $10 M_{\odot})$. Voltage variations may be noted due to normal production tolerances.

• Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.

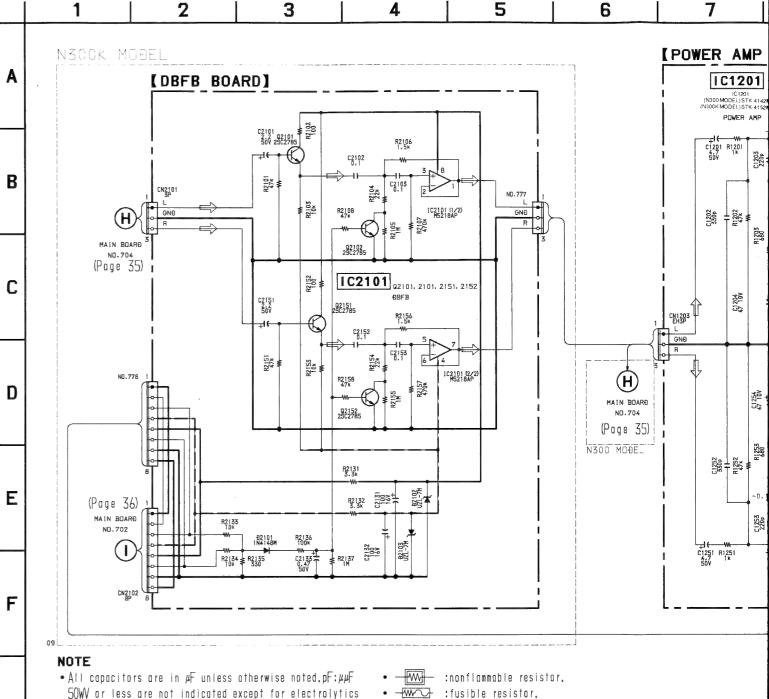


6-11. PRINTED WIRING BOARD — TUNER SECTION —

- · See page 27 for Circuit Boards Location.
- · See page 28 for Semiconductor Lead Layouts.



6-12. SCHEMATIC DIAGRAM — AMP SECTION —



50WV or less are not indicated except for electrolytics

and tantalums.

• All resistors are in Q and 1/4W or less unless otherwise

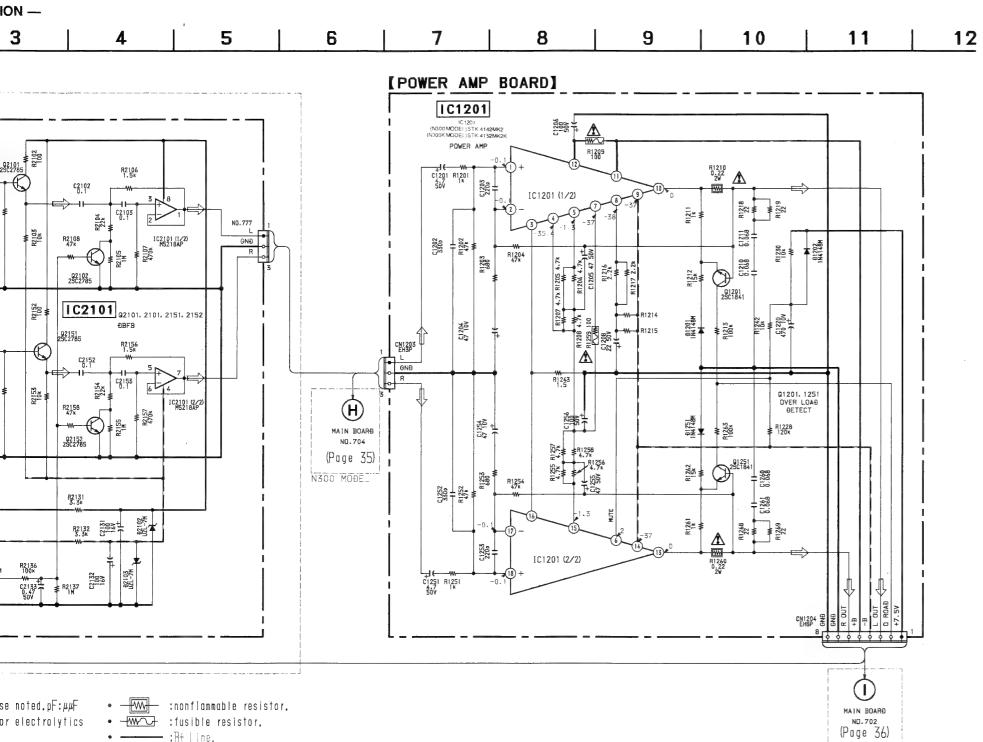
• B+ Line,
• B- Line.

Note:The components identified by mark 🛦 or dotted line with mark \Lambda are critical for safety. Replace only with part number specified.

G

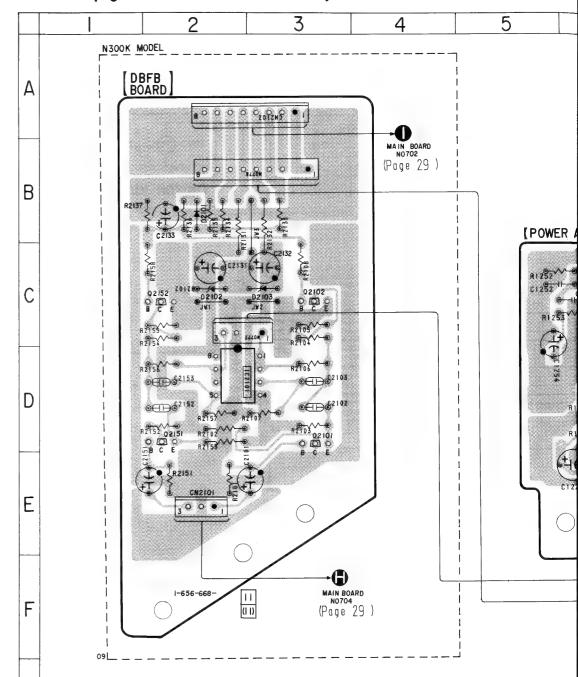
Н

- Voltages and waveforms are dc with respect to ground under no-signal (deturned) conditions.
- Voltages are taken with a VOM (Input impedance 10MQ). Voltage variations may be noted due to normal production tolerances.
- Signal path. :FM



6-13. PRINTED WIRING BOARD — AMP SECTION —

- See page 27 for Circuit Boards Location.
 See page 28 for Semiconductor Lead Layouts.



🕽 or dotted | safety. fied.

or electrolytics • + fusible resistor.

• — :B+ Line, unless otherwise • — - :B- Line.

• Voltages and waveforms are dc with respect to ground under no-signal (deturned) conditions. no mark:FM

- Voltages are taken with a VOM (Input impedance 10MQ). Voltage variations may be noted due to normal production tolerances.
- Signal path. :FM

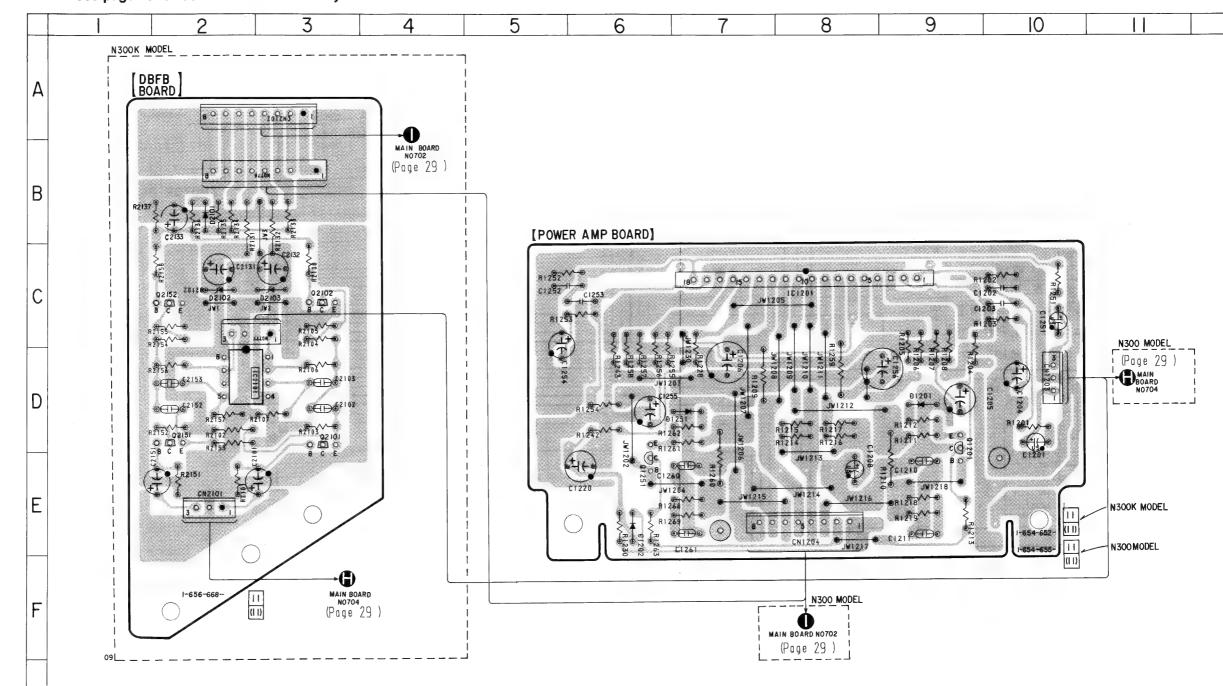
N300 MOĐEL

6-13. PRINTED WIRING BOARD — AMP SECTION — • See page 27 for Circuit Boards Location. • See page 28 for Semiconductor Lead Layouts.

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11

MAIN BOARĐ Np.702 (Page 36) N300 MOĐEL 12



Semiconductor Location

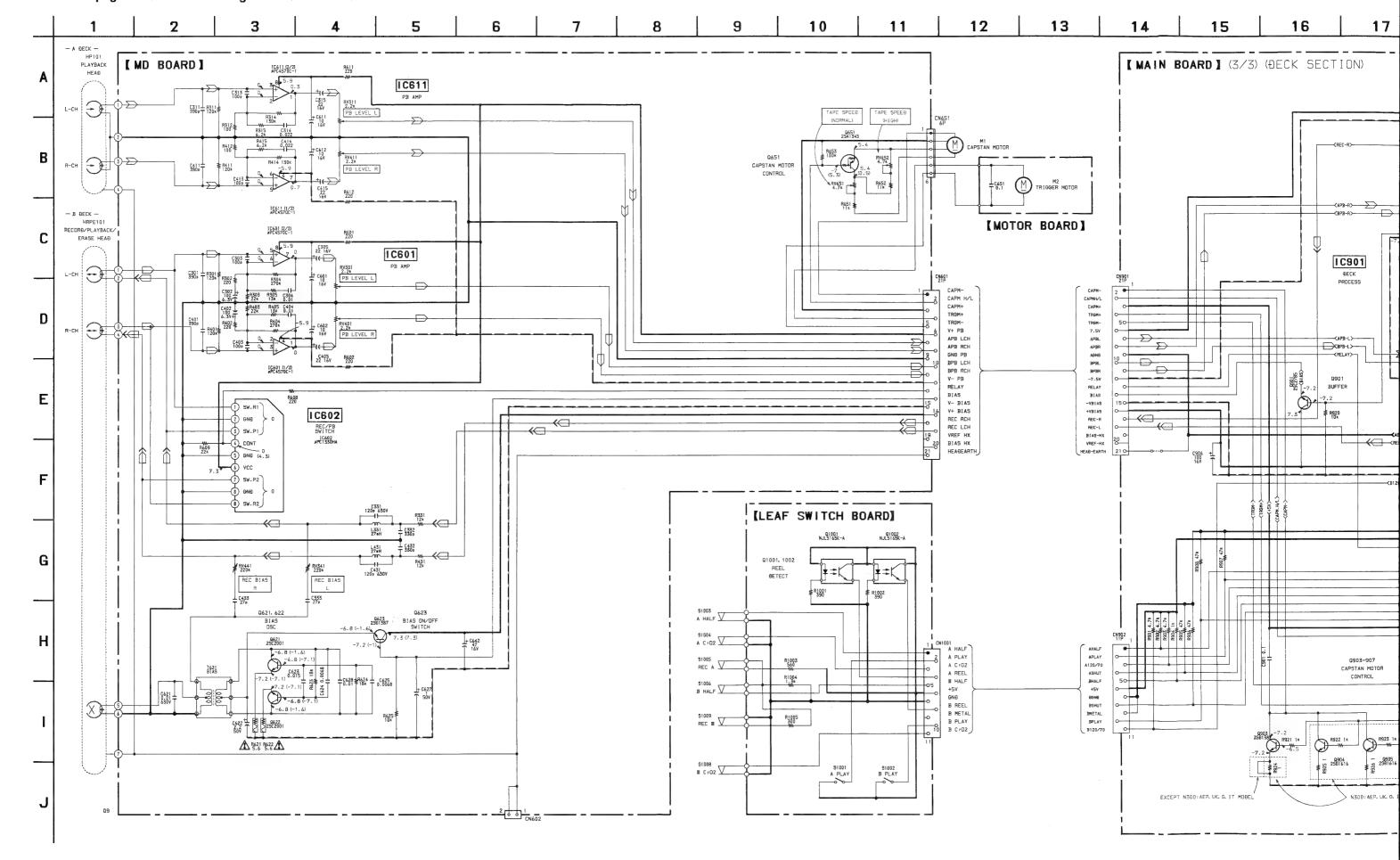
Ref. No.	Location	Ref. No.	Location	
D1201 D1202	D-9 E-6	IC2101	D-2	
D1251	D-7	Q1201	D-9	
D2101	B-2	Q1251	E-6	
D2102	C-2	Q2101	D-3	
D2103	C-3	Q2102	C-3	
		Q2151	D-2	
IC1201	C-8	Q2152	C-2	

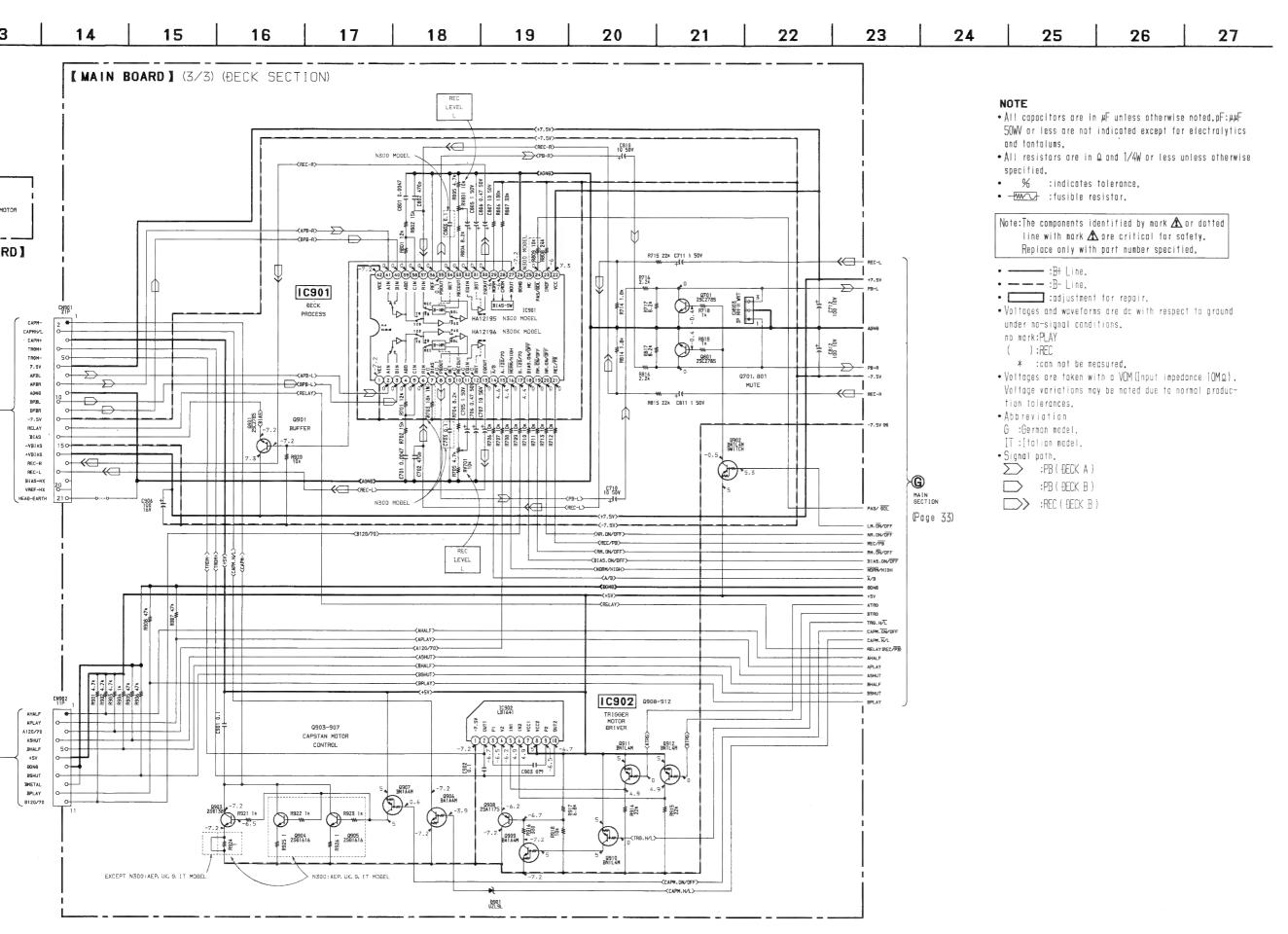
Note:

· Pattern from the side which enable seeing.

6-14. SCHEMATIC DIAGRAM — DECK SECTION —

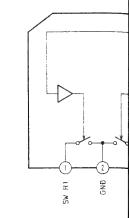
· See page 29 for Printed Wiring Board of MAIN BOARD.



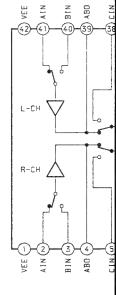


IC Block Diagra

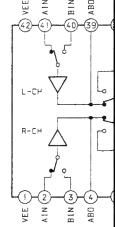
IC602 μPC1330HA



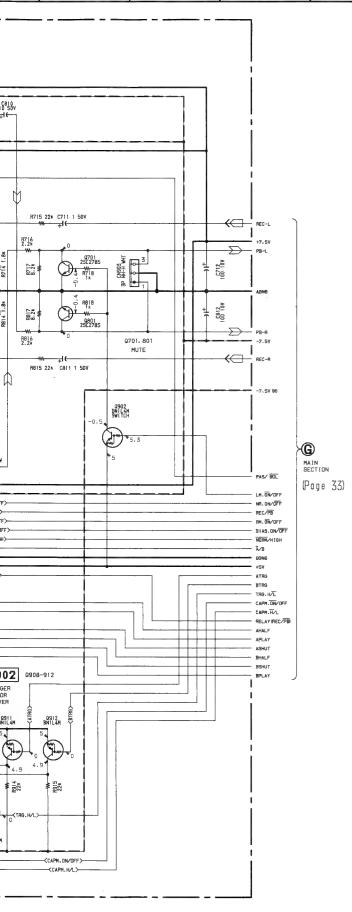
IC901 HA12195



IC901 HA12196



21 22 23 24 25 26 27



NOTE

- All capacitors are in μF unless otherwise noted.pF:μμF 50WV or less are not indicated except for electrolytics and tantalums,
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- % :indicates talerance,
- - fusible resistor.

Note:The components identified by mark $oldsymbol{\Lambda}$ or dotted line with mark \Lambda are critical for safety. Replace only with part number specified.

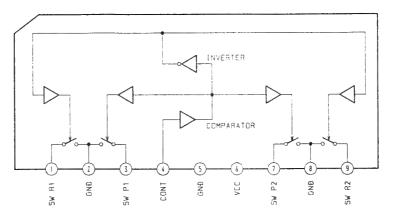
- ----:B+ Line,
- :B- Line,:adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal conditions. no mark:PLAY

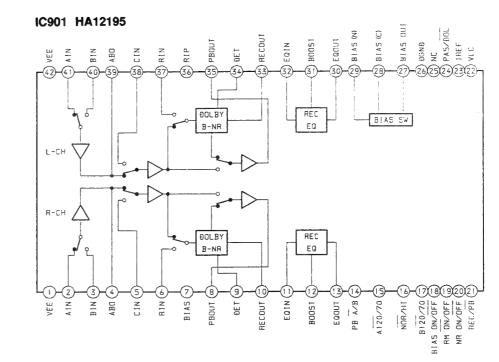
():REC

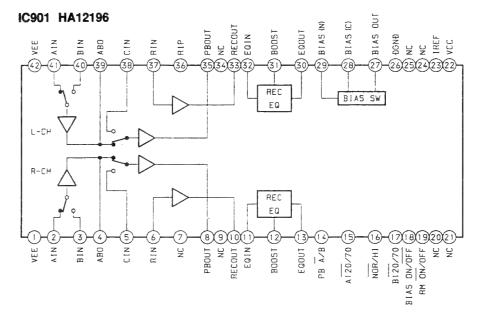
- * :can not be measured.
- Voltages are taken with a VOM (Input impedance 10M $_{\Omega}$). Voltage variations may be noted due to normal production tolerances.
- Abbreviation
- G :German model.
- IT :[talian model,
- Signal path.
- > :PB (DECK A)
- ⇒ :PB(⊕ECK B)
- :REC (DECK B)

· IC Block Diagrams.

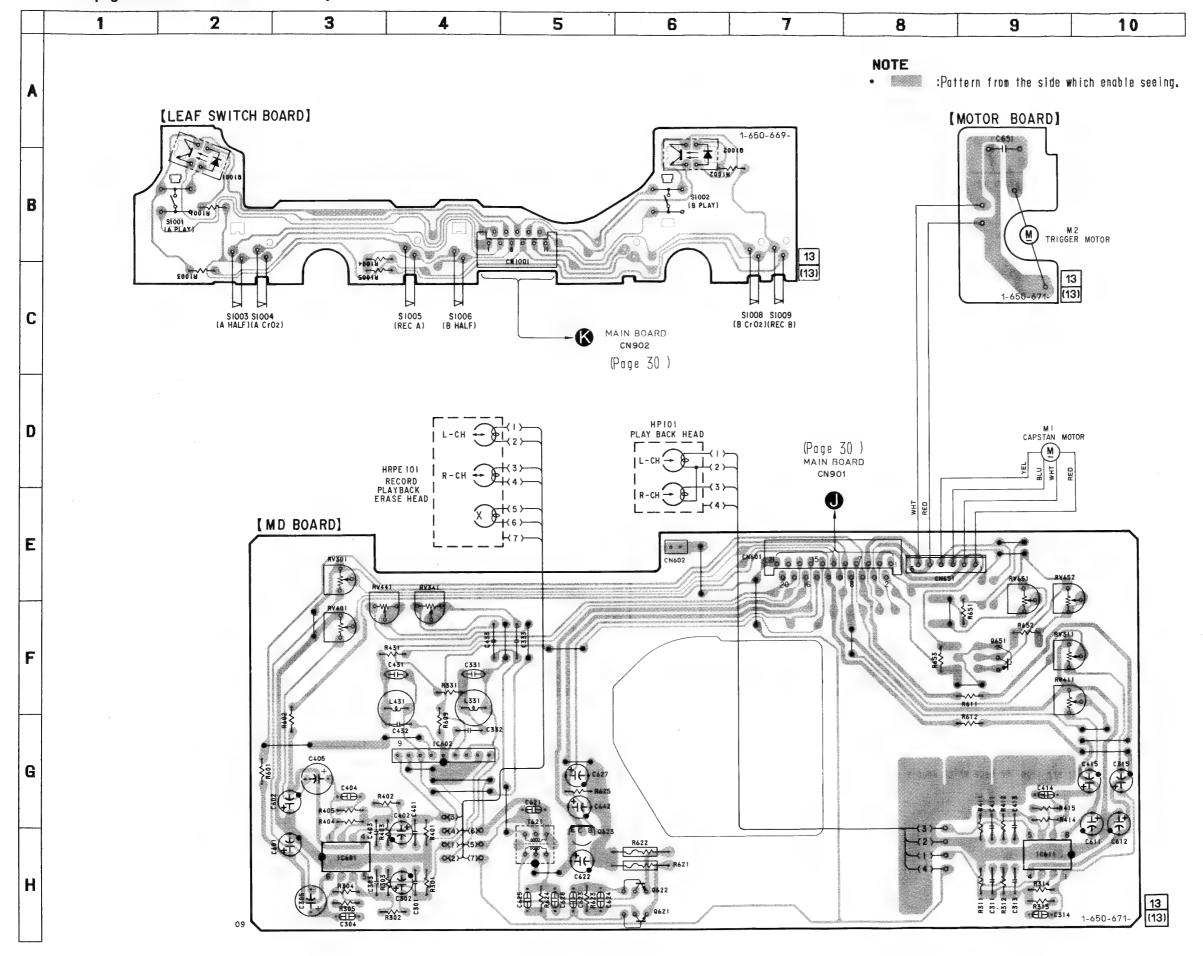
IC602 μPC1330HA







6-15. PRINTED WIRING BOARD — DECK SECTION — • See page 27 for Circuit Boards Location. • See page 28 for Semiconductor Lead Layouts.



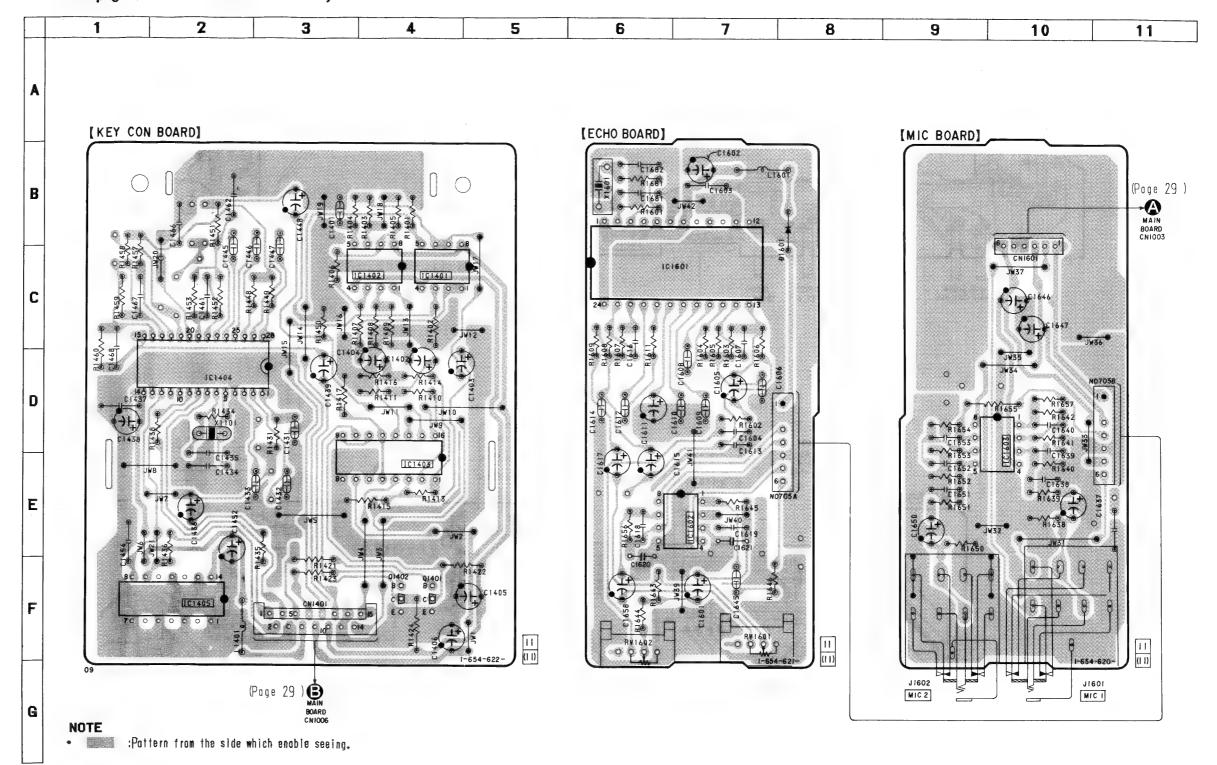
Semiconductor Location

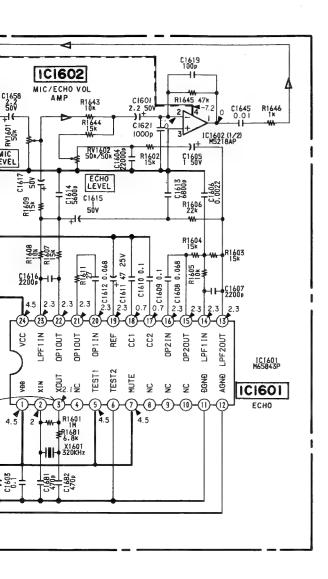
Ref. No.	Location
IC601	H-3
IC602	G-4
IC611	H-9
Q621	I-6
Q622	H-6
Q623	H-5
Q651	F-9
Q1001	B-2
Q1002	B-6

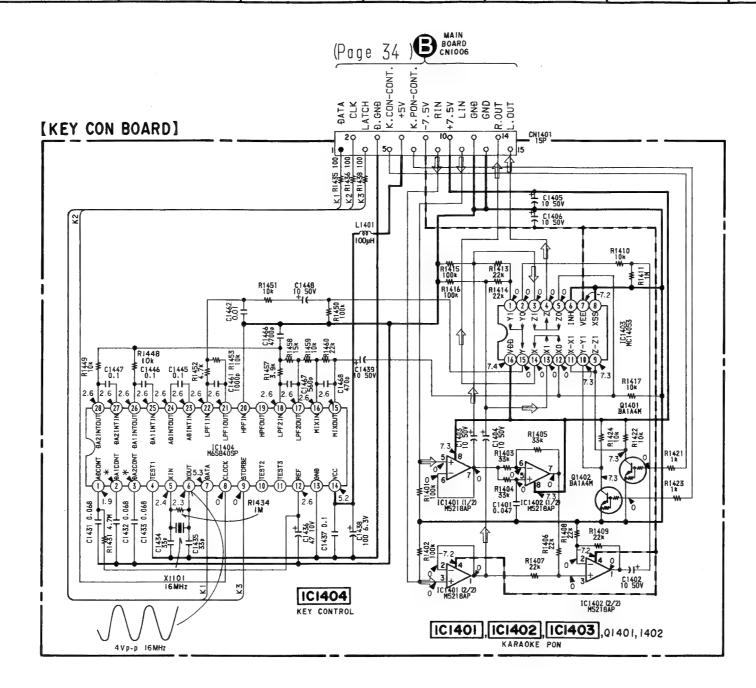
Semiconductor Location

Ref. No.	Location
D1601	B-8
IC1401 IC1402 IC1403 IC1404 IC1601 IC1602 IC1603	C-4 C-4 E-4 D-2 C-7 E-7 D-10
Q1401 Q1402	F-4 F-4

6-16. PRINTED WIRING BOARD — KARAOKE SECTION — (N300K MODEL ONLY) • See page 27 for Circuit Boards Location. • See page 28 for Semiconductor Lead Layouts.







:B+ Line.

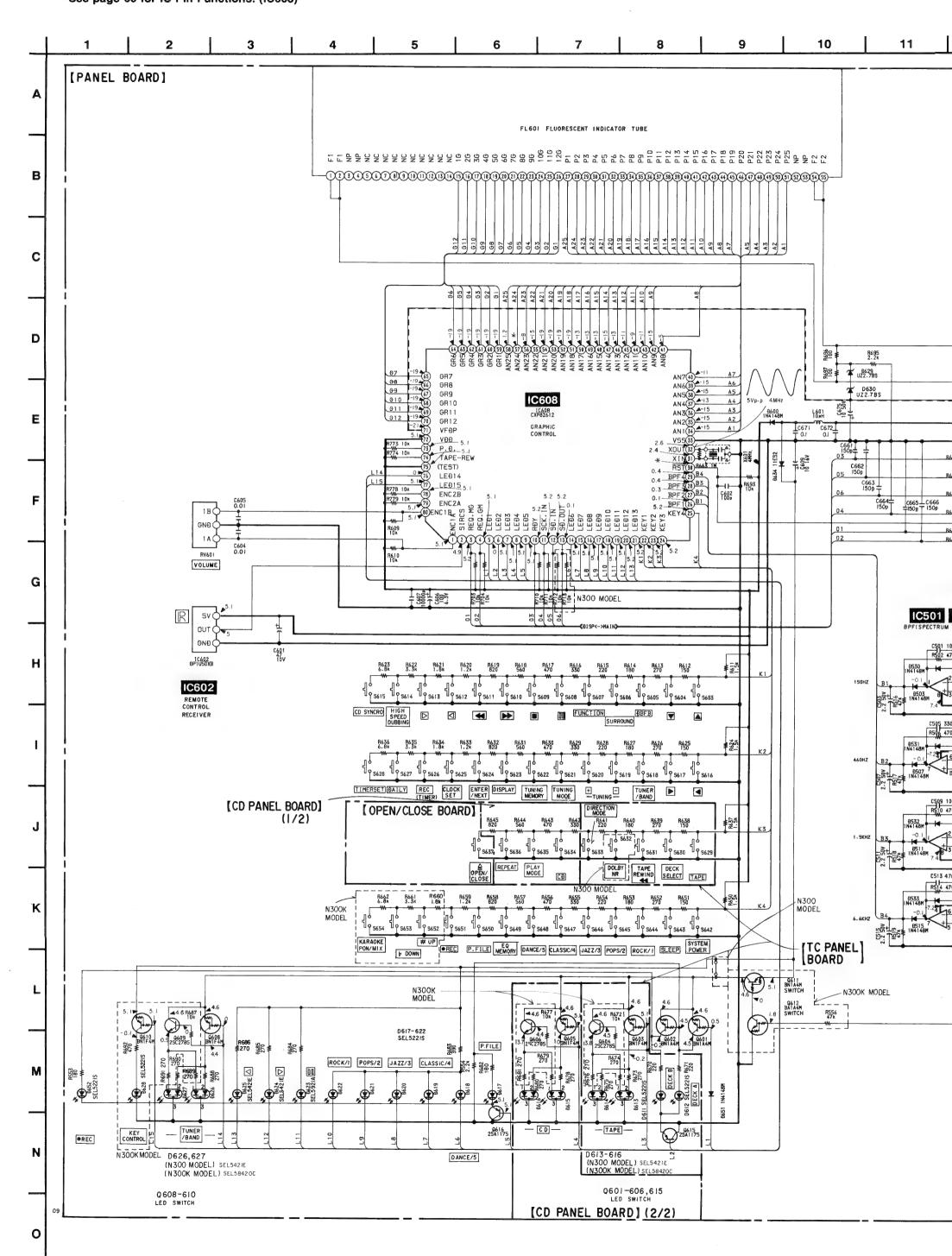
:B- Line. nd waveforms are do with respect to ground—tion tolerances. ignal conditions.

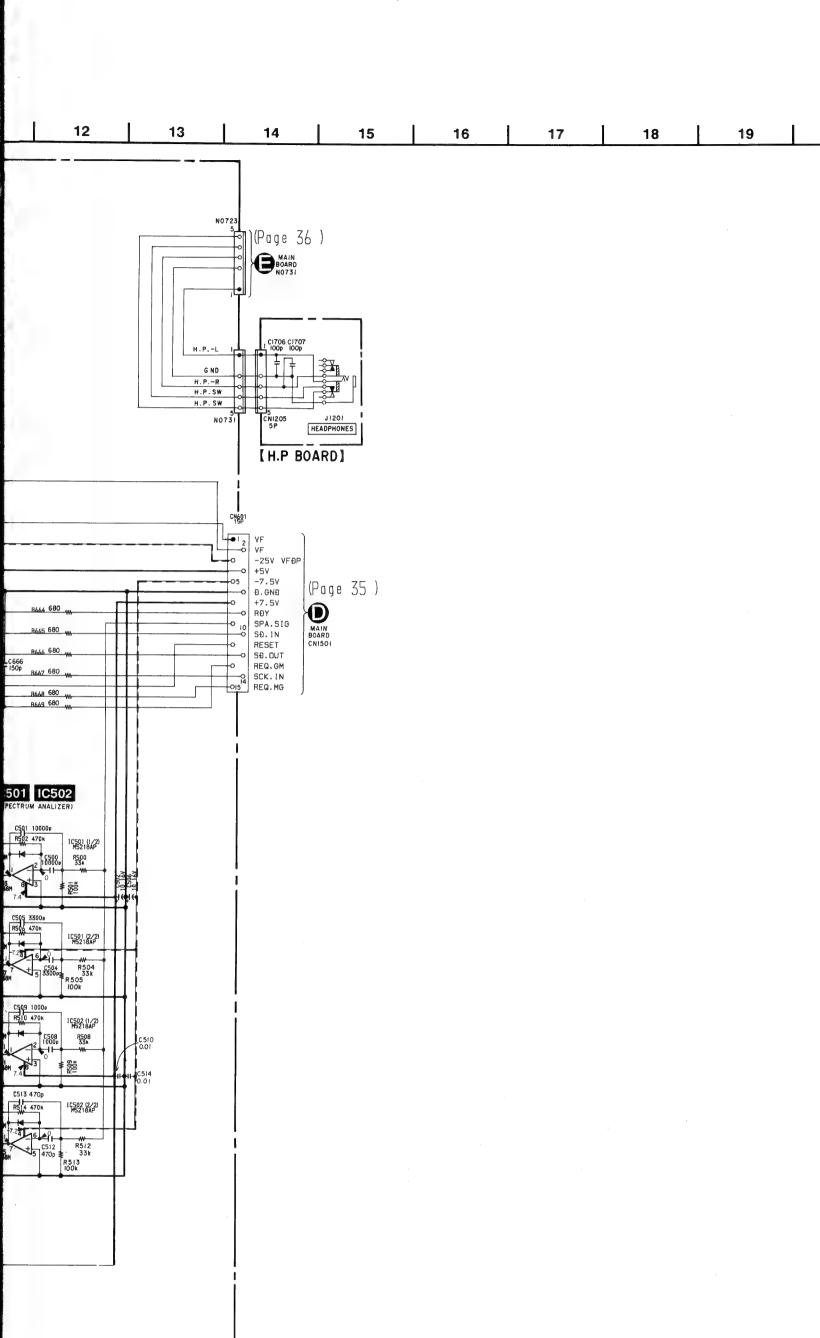
n not be measured.

- Voltages are taken with a VOM (Input impedance $10M\Omega$). Signal path. Voltage variations may be noted due to normal produc-
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.

- :MIC

6-18. SCHEMATIC DIAGRAM — PANEL SECTION — See page 66 for IC Pin Functions. (IC608)





20

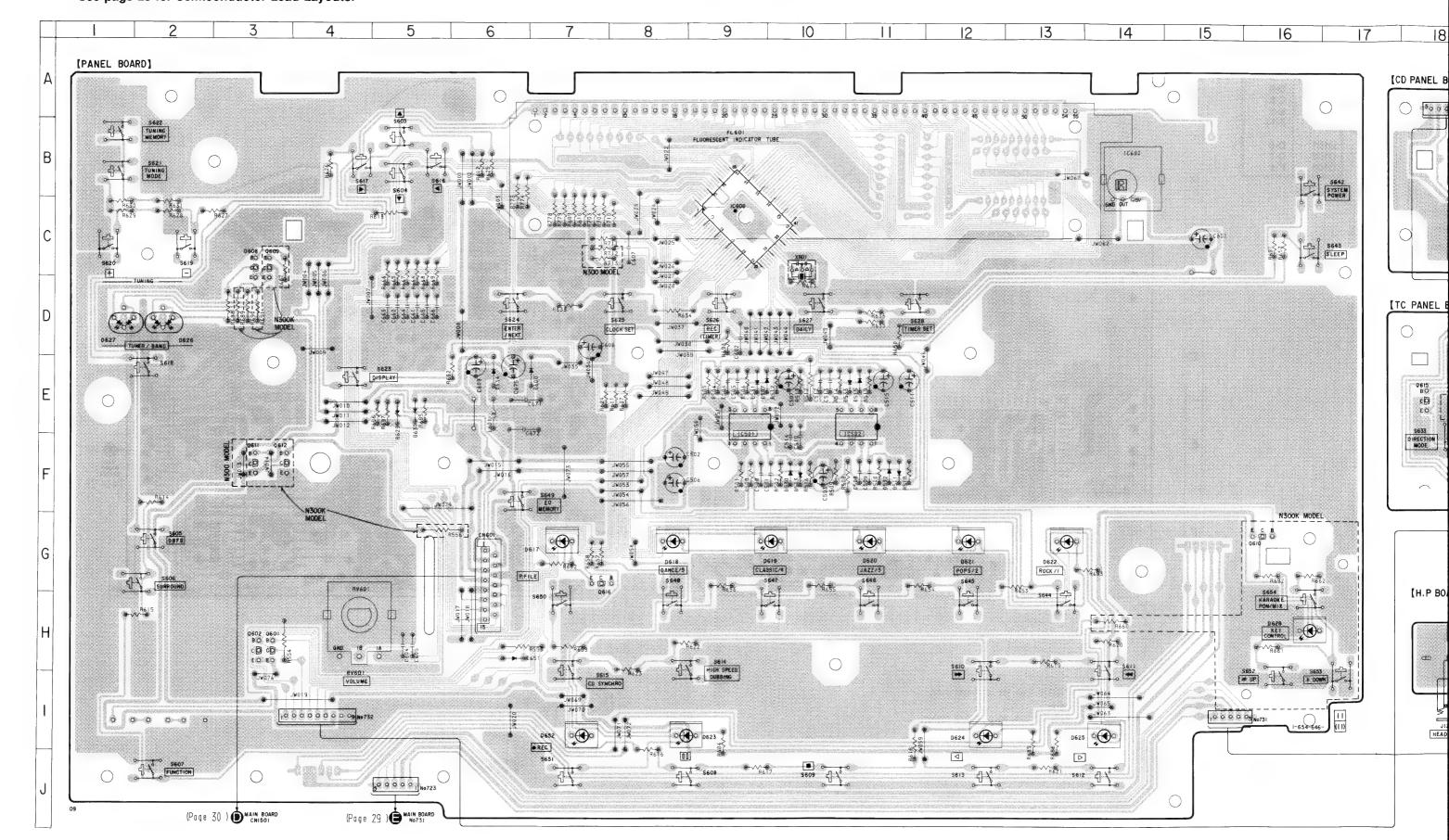
- All capacitors are in μF unless otherwise noted, $p F : \mu \mu F$ 50WV or less are not indicated except for electrolytics and
- All resistors are in $\boldsymbol{\Omega}$ and 1/4W or less unless otherwise specified.
- panel designation.
- : B+ Line
- ----: B- Line
- Voltage and waveforms are dc with respect to ground under no-signal (deturned) conditions.
 - no mark : FM
 - * : can not be measured.
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production

6-19. PRINTED WIRING BOARD — PANEL SECTION — • See page 27 for Circuit Boards Location. • See page 28 for Semiconductor Lead Layouts.

: parts mounted on the conductor side.

· Pattern from the side which enable seeing.

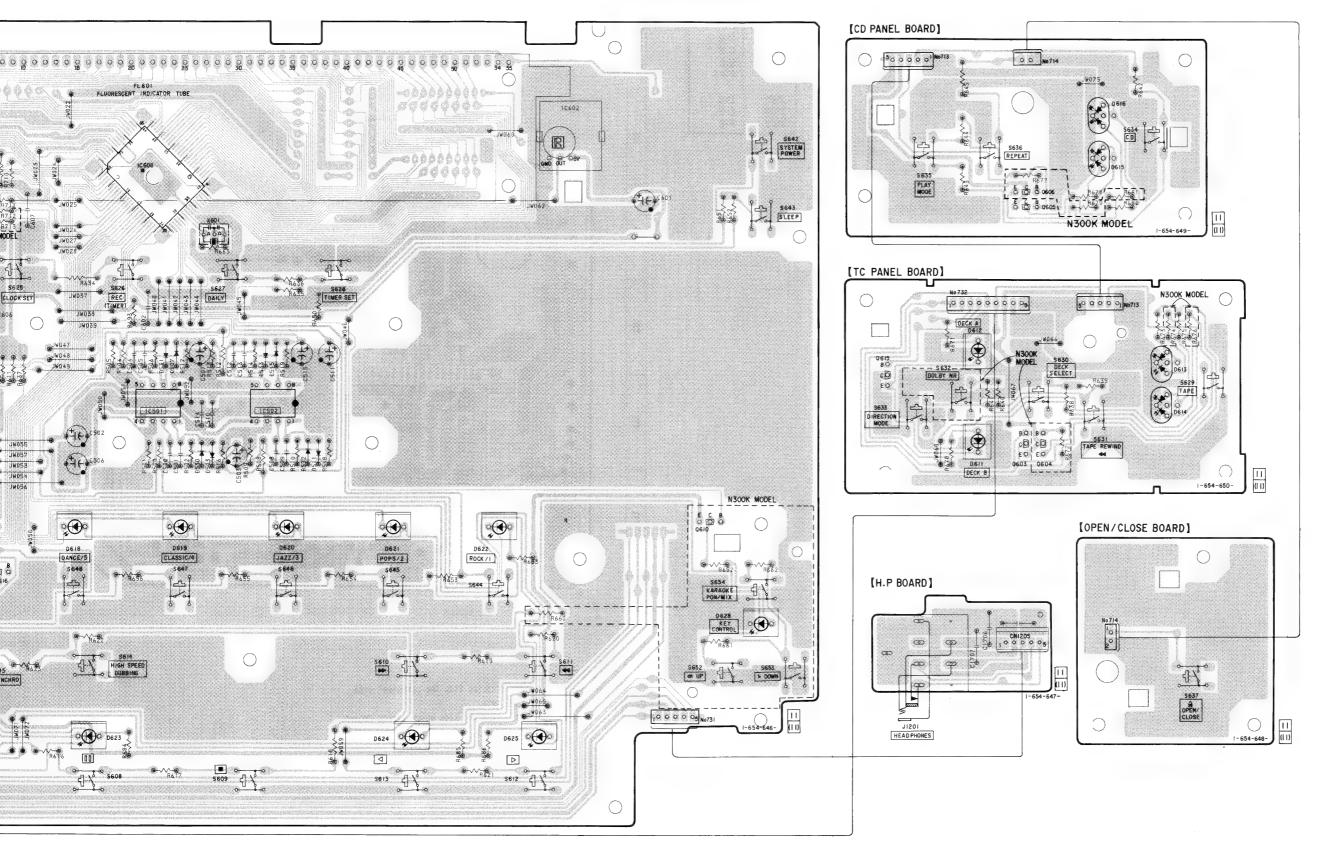
Δ : internal component.



the conductor side. Pattern from the side which enable seeing. 10 12 13 14 15 16 18 19 20 21 22 23 [CD PANEL BOARD] 0 0 No714 \bigcirc 500000

 Semiconductor Location

Location					
Ref. No.	Location				
D503 D507 D507 D511 D515 D530 D531 D532 D533 D600 D611 D612 D613 D614 D615 D616 D617 D618 D619 D620 D621 D622 D623 D624 D625 D626 D627 D628 D629 D630 D634 D651 D652	F-10 E-9 F-12 E-11 F-10 E-9 F-11 E-10 E-7 F-19 E-21 E-21 C-20 B-20 G-7 G-8 G-11 G-12 G-14 I-8 I-12 I-14 D-2 D-1 H-16 E-5 E-6 H-6 I-7				
IC501 IC502 IC602 IC608	F-9 F-11 C-14 C-9				
Q601 Q602 Q603 Q604 Q605 Q606 Q608 Q609 Q610 Q611 Q612 Q615 Q616	H-3 H-3 F-19 H-18 C-19 C-19 C-3 C-3 G-16 F-3 F-3 E-18 G-7				



HCD-N300/N300K

6-20. IC PIN FUNCTIONS — PANEL SECTION —

• IC608 GRAPHIC CONTROL (CXP82612-006Q/009Q) IC PIN FUNCTIONS

Pin No.	Pin Name	I/O	Function			
1	ENC1A	I	Volume encoder signal input.			
2	SIRCS	I	SIRCS signal input.			
3	REQ. MG	I	Request signal from master control.			
4	REQ. GM	0	Request signal to master control.			
5 –9	LED1-5	0	LED drive signal output.			
10	RDY	I/O	RDY signal from/to master control.			
11	SCK IN	I	Serial clock input.			
12	SD IN	1	Serial data input.			
13	SD OUT	0	Serial data output.			
14-21	LED6-13	0	LED drive signal output.			
22–25	KEY1-4	I	Key matrix input.			
26–29	BPF1-4	I	Spectram analizer signal input.			
30	RST	I	Reset signal input.			
31	X IN	1	Vo. L(ART)			
32	X OUT	0	X'tal (4MHz).			
33	Vss	_	GND			
34–58	AN1-25	0	FL segment signal output.			
59–70	GR1-12	0	FL grid signal output.			
71	VFDP	-	-25V for FL			
72	VDD	_	+5V			
73, 74	PD	ı	Not used. (Pull up)			
75	VDD	-	+5V			
76, 77	LED14, 15	0	LED drive signal output.			
78, 79	ENC2B, A	I	Not used. (Pull up)			
80	ENC1B	I	Volume encoder signal input.			

6-21. PRINTED WIRING BOARD — CD SECTION —

- See page 27 for Circuit Boards Location.
 See page 28 for Semiconductor Lead Layouts.

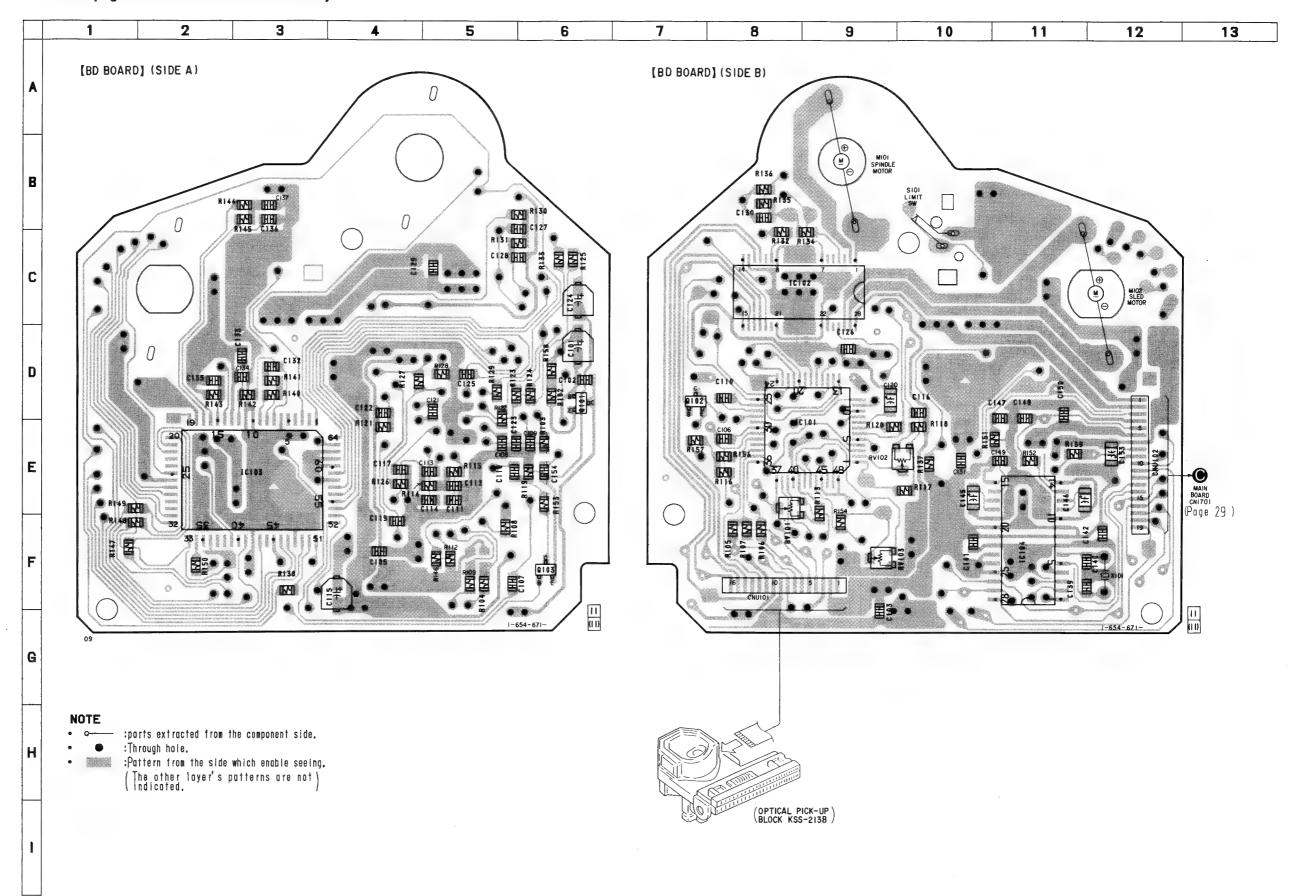
Semiconductor Location Ref. No. Location IC101 IC102 IC103 IC104 D-9 C-8 E-3 F-11 Q101 Q102 Q103 D-6 D-7 F-6

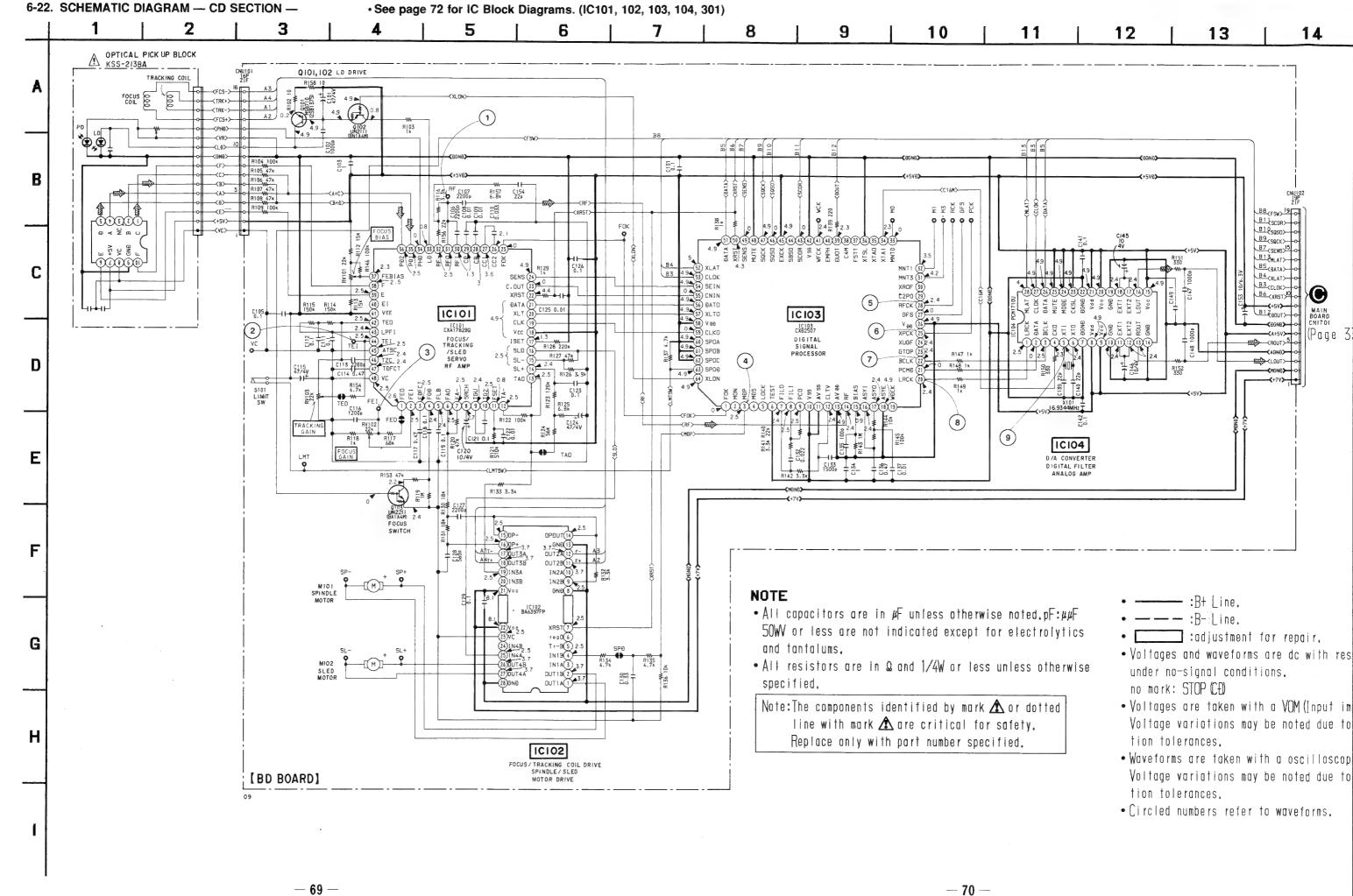


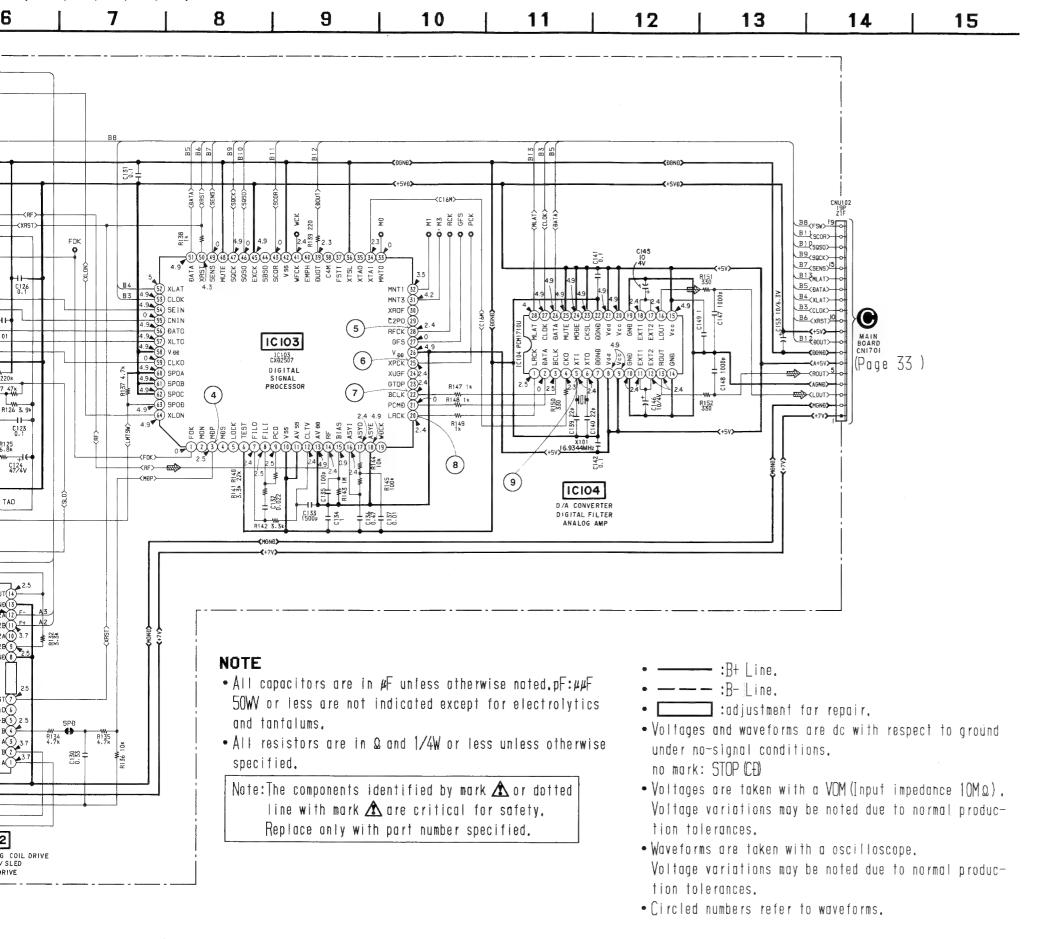
6-21. PRINTED WIRING BOARD — CD SECTION — • See page 27 for Circuit Boards Location. • See page 28 for Semiconductor Lead Layouts.

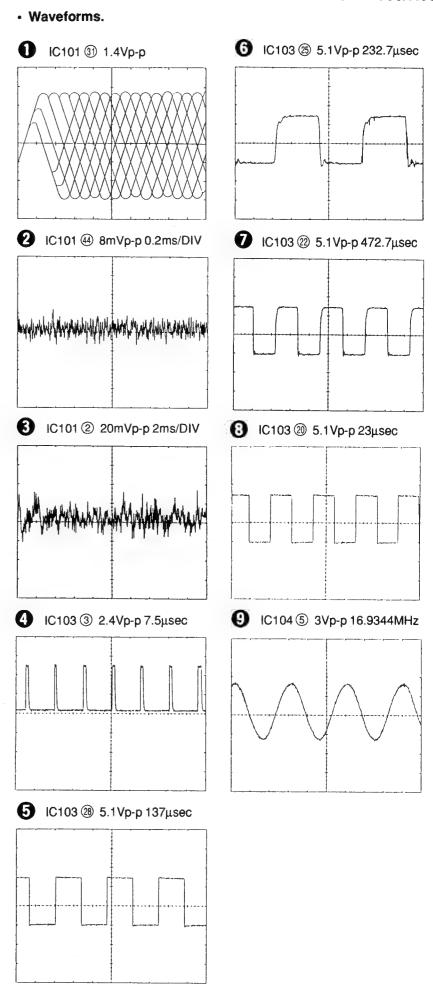
Semiconductor Location

Ref. No.	Location
IC101	D-9
IC102	C-8
IC103	E-3
IC104	F-11
Q101	D-6
Q102	D-7
Q103	F-6

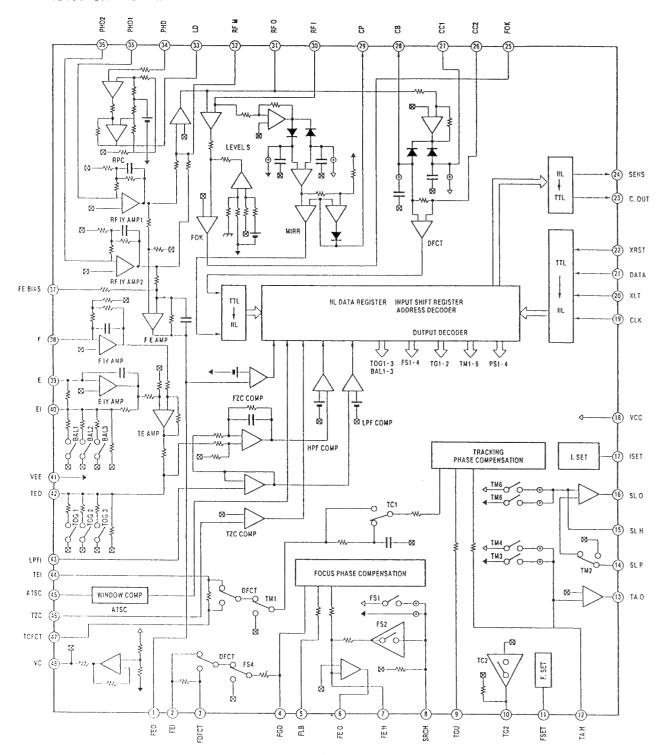




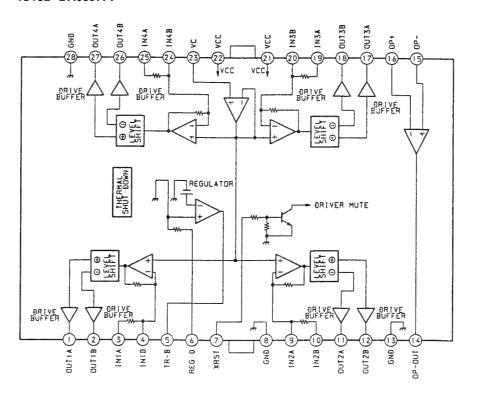




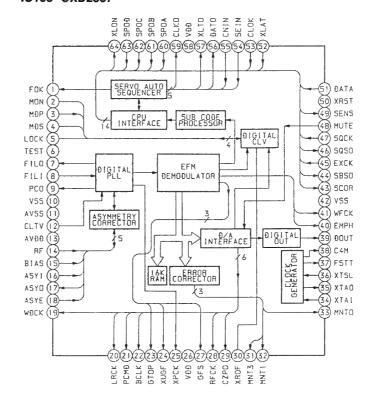
IC101 CXA1782BQ

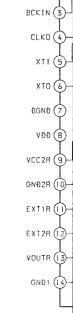


IC102 BA6397FP

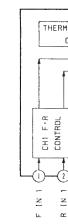


IC103 CXD2507

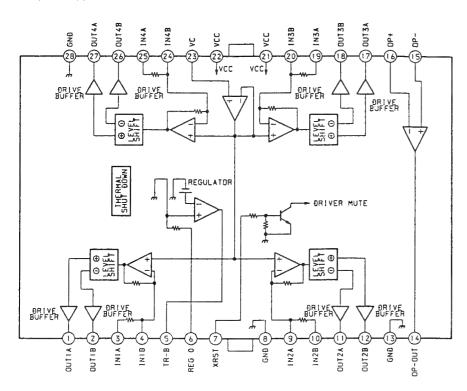




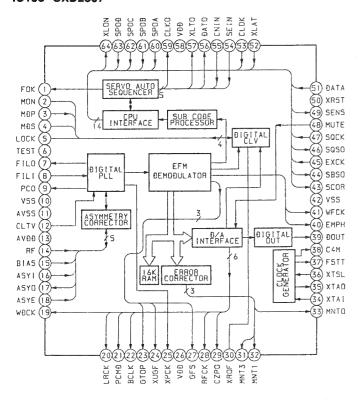
IC301 B



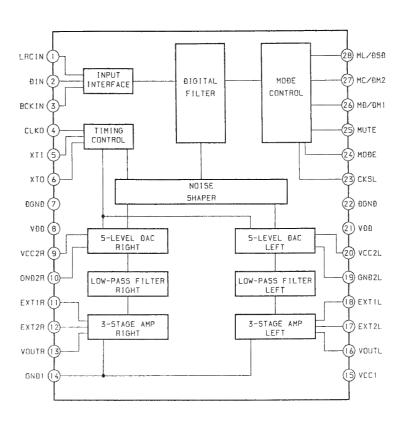
IC102 BA6397FP



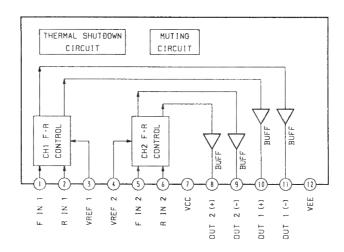
IC103 CXD2507



IC104 PCM1710U

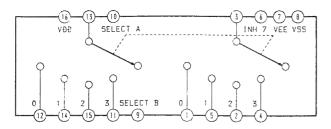


IC301 BA6191

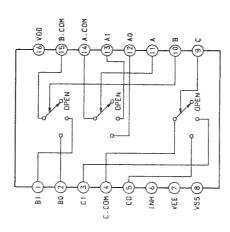


6-24. IC BLOCK DIAGRAMS — MAIN SECTION —

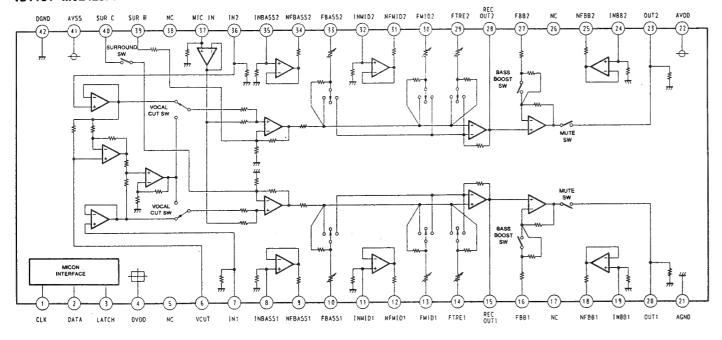
IC1002 MC14052BCP



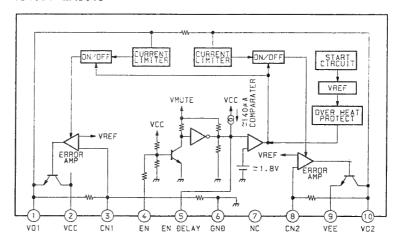
IC1003 MC14053BCP



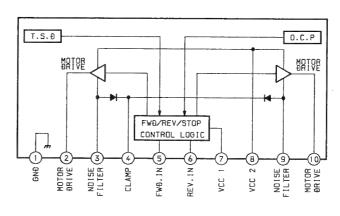
IC1101 M62423FP



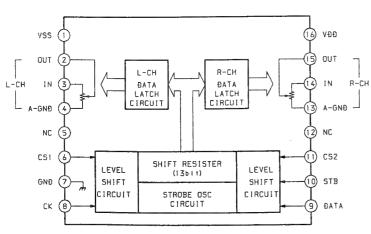
IC1351 LA5618



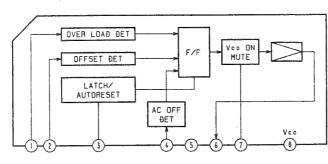
IC1901 LB1641



IC1131 TC9210P



IC1202 μPC1237HA



6-25. IC PIN FUNCTIONS — MAIN SECTION —

• IC1051 MASTER CONTROL (TMP87CP64F-6254)

Pin No.	Pin Name	I/O	Function
1	Vss	I/O	GND
2	XOUT	_	X'tal (8MHz).
3	XIN	I	X tal (own2).
4	RESET	I	Reset signal input.
5	XOUT	0	V/v15
6	XIN	1	X'tal for clock (32.768kHz)
7	GND (test)	-	GND
8	BACK UP	I	Back up signal input.
9	COUNT SW	1	
10	ĪNIT SW	1	Newword
11	DISC SENS	I	Not used.
12	MID SENS	I	
13	CD XRST	0	Reset signal output for CD.
14	POWER ON	0	Power on signal output.
15	MUTE (TA)	0	Mute signal for AMP.
16	MPX ON	0	Control signal output for MPX. (N300K)
17	KEY CON LATCH	0	Latch signal for KEY CON. (N300K)
18	VOL LATCH	0	Latch signal for electrical volume.
19	K-CON	0	Control siganl output for KEY CON. (N300K)
20	K-PON B	0	Control signal output for KARAOKE PON. (N300K)
21	FUNC A	0	
22	FUNC B	0	Input selector control signal output.
23	FUNC C	0	
24	GEQ. LATCH	0	Latch signal for graphic equalizer
25	RDS INT	1	Not used. (Pull up)
26	SCOR	I	Sub-code sync signal input.
27	SENS	I	Table sence signal input.
28	CD POWER	0	CD power control signal output.
29	CD. G-LATCH	0	Not used.
30	DBFB1-2	0	DBFB switching signal output.
31	ST-MUT	0	Mute signal output for tuner.
32	ST-CE	0	Latch signal output for tuner.
33	STEREO	I	Stereo detection signal from tuner.
34	TUNED	I	Tuned detection signal from tuner.
35	SQ (RDS) CLK	0	Clock output for sub-Q.
36	SQ (RDS) DI	I	Sub-Q input.
37	RDS RESET	0	Not used.
38	CLK	0	Clock output. Serial bus line.
39	DIN	I	Data input. Serial bus line.
40	D OUT	0	Data output. Serial bus line.

Pin No.	Pin Name	I/O	Function					
41	TABLE SENS	I	Sense signal input.					
42	REQ GM	I	Request signal from graphic control.					
43	REQ MG	0	Request signal to graphic control.					
44	CLK MG	0	Clock signal to graphic control.					
45	DI GM	I	Data input from graphic control.					
46	DO MG	0	Data output to graphic control.					
47	MC RDY	I/O	RDY signal from/to graphic control.					
48	VAREF	I	Analog reference voltage input.					
49	VAss	_						
50	Vss	_	Sold					
51	VDD	_	+5V					
52	UNGENT. SIG	I	Not used. (Pull up)					
53	URGENT. STBY	0	Not used.					
54–57	SUBKEY4-1	I	Test land.					
58, 59	DEST2, 1	I	Network					
60, 61	PWM1, 2	I	Not used.					
62	B-PLAY	I						
63	B-SHUT	I						
64	B-HALF	I	Contributions					
65	A-SHUT	I	Control signal input from deck.					
66	A-PLAY	I						
67	A-HALF	I						
68	CAP M H/L	0	Control					
69	CAP M ON/OFF	0	Control signal output for capstan motor.					
70	TRIG H/L	0						
71	B TRIG	0	Control signal output for trigger motor.					
72	A TRIG	0)					
73	RELAY REC/PB	0						
74	PB A/B	0						
75	EQ NORM/HIGH	0						
76	BIAS ON OFF	0	Control signal output for deck.					
77	RM ON/OFF	0						
78	REC/PB	0						
79	NR ON/OFF	0	J					
80	LM ON/OFF	0	Mute signal output for deck.					
81	PASS	0	Dolby switching signal output.					
82	CDG MUTE	0)					
83	UP MOTOR	0						
84	DOWN MOTOR	0	Not used.					
85	TABLE R (5CD)	0	}					

Pin No.	Pin Name	I/O	Function		
86	TABLE L (5CD)	0	Not used.		
87	LOAD OUT	0			
88	LOAD IN	0	Loading motor control signal output.		
89	DF LATCH	0	Latch signal for digital filter.		
90	XLT	0	Latch signal digital signal processor.		
91	FOCUS SW	0	Focus switching signal output,.		
92	DUB HI	1	Hi speed dubbing signal input.		
93	TEST-1	I	Test land.		
94	OUT SW	I	Out switch signal input.		
95	ĪNSW	I	Down switch signal input.		
96	UP SW (5CD)	I	Up switch signal input.		
97	PANEL SW (MAGK)	I			
98	CLOSE SW	1	Not used.		
99	OPEN SW	I			
100	VDD	_	+5V		

SECTION 7 EXPLODED VIEWS

NOTE:

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

7-1. CASE SECTION

Abbreviation

G : German model IT : Italian model : East European model EE EA : Saudi Arabia model : Singapore model : Malaysia model SP MY

AEP1 : AEP model without power source for PS-LX56P

The components identified by mark \triangle or dotted line with mark \triangle are critical for safety.

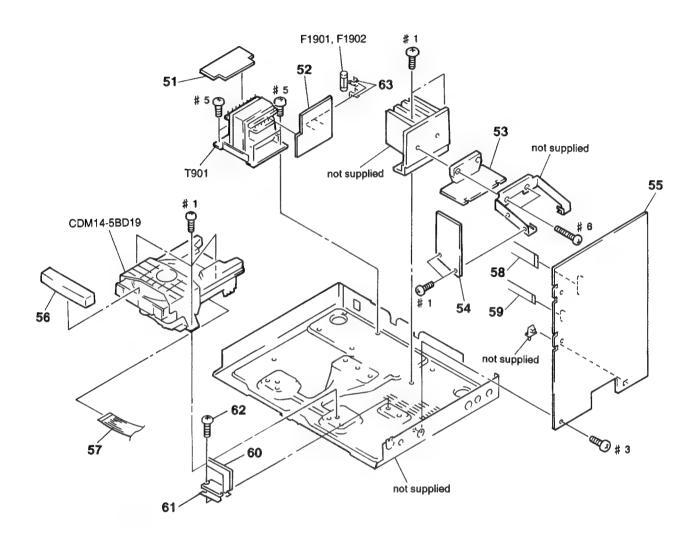
Replace only with part number

AEP2 : AEP model with power source for PS-LX56P

not supplied ୍#3 ଶ୍ର S1911 not supplied not supplied

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1 2 * 3 * 3 * 3	4-969-783-11 4-969-783-21	SCREW (CASE 3 PANEL, BACK PANEL, BACK		△ 5 △ 6 △ 7 △ 8 9	1-575-651-21 1-569-008-11 1-751-529-11	CORD, POWER (N300K:E) CORD, POWER (N300:AEP, G, IT, EE, CIS/N300K:EA, M) ADAPTER, CONVERSION 2P (N300K:EA, M) CORD, POWER (N300:UK) BUSHING (FBS001), CORD	
* 3 * 3 * 3 * 3 * 3	4-969-783-51 4-969-783-61 4-969-783-71	PANEL, BACK PANEL, BACK PANEL, BACK PANEL, BACK PANEL, BACK	(N300:1T) (N300:EE) (N300:CIS)	9 10 * 11 * 11	4-966-266-01 4-921-918-11 A-4377-151-A	(N300/N300K:EA, M BUSHING (S) (FBS002), CORD (N300K:E) PLATE, ORNAMENTAL KEY-CON BOARD, COMPLETE (N300K) POLAR BOARD, COMPLETE (N300:CIS)	
* 3 * 3 * 3 * 3	4-970-162-11 4-970-162-21 4-970-162-31	PANEL, BACK PANEL, BACK PANEL, BACK PANEL, BACK ADAPTER, CONV	(N300K:E) (N300K:MY)	12 12 * 13 14 △S1911	1-690-113-11 1-690-590-31 4-949-235-11 4-956-370-12	WIRE, FLAT TYPE (15 CORE) (N300K) WIRE (FLAT TYPE) (13 CORE) (N300:CIS) HOOK (N300:AEP, G, IT, EE, CIS/N300K) BAND, PLUG FIXED (N300:UK) SWITCH, VOLTAGE CHANGE (N300K:E, EA,	

7-2. CHASSIS SECTION

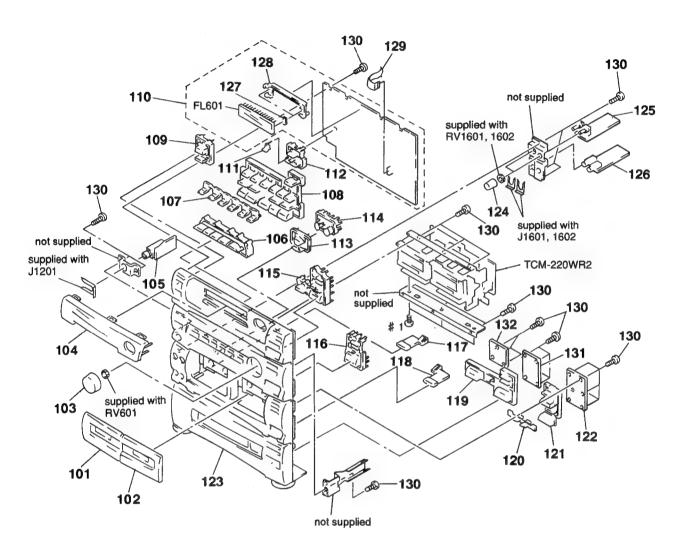


The components identified by mark \triangle or dotted line with mark \triangle are critical for safety.

Replace only with part number specified.

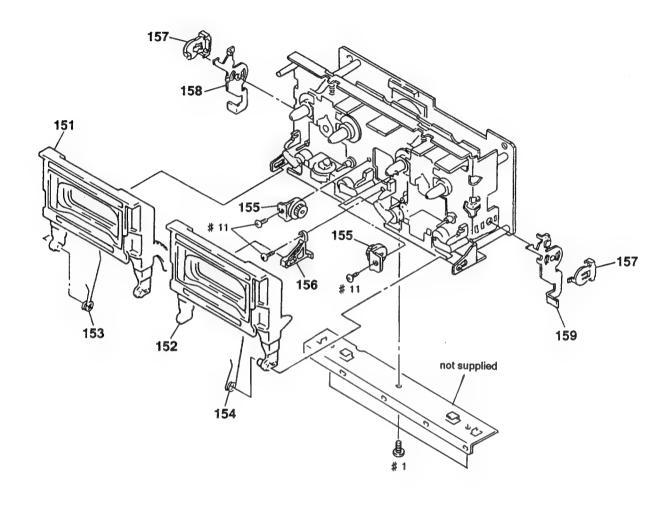
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 51 * 52 * 53	1-654-654-11	POWER PRIMARY BOARD POWER BOARD POWER AMP BOARD, COM	PLETE	* 55 56		MAIN BOARD, COMPLETE (N300K:EA) PANEL, LOADING	
* 53 * 53		POWER AMP BOARD, COMPOWER AMP BOARD, COMP		57 58 59 * 60	1-751-590-11 1-590-459-11	WIRE (FLAT TYPE) (19 CORE) WIRE (FLAT TYPE) (21 CORE) WIRE, FLAT TYPE (11 CORE) REGULATOR BOARD	
* 54 * 55 * 55	A-4377-116-A	DBFB BOARD (N300K) MAIN BOARD, COMPLETE MAIN BOARD, COMPLETE		* 61 62	3-895-841-21	SPACER (IC)	
* 55 * 55	A-4377-461-A	MAIN BOARD, COMPLETE MAIN BOARD, COMPLETE	(N300:AEP1)	63 AF1901 AF1902	1-532-350-00	HOLDER, FUSE FUSE, TIME LAG (T4AL)	
* 55 * 55 * 55	A-4377-630-A	MAIN BOARD, COMPLETE MAIN BOARD, COMPLETE MAIN BOARD, COMPLETE	(N300:G)	⚠ T901	1-427-706-11	FUSE, TIME LAG (T4AL) TRANSFORMER, POWER (N300K) TRANSFORMER, POWER (N300)	
. 55	1 1011 002 n	milli Domo, Com Della	(11000.11)	751701	1 421 101-11	IMMOTORMEN, TOMER (NSUU)	

7-3. FRONT PANEL SECTION



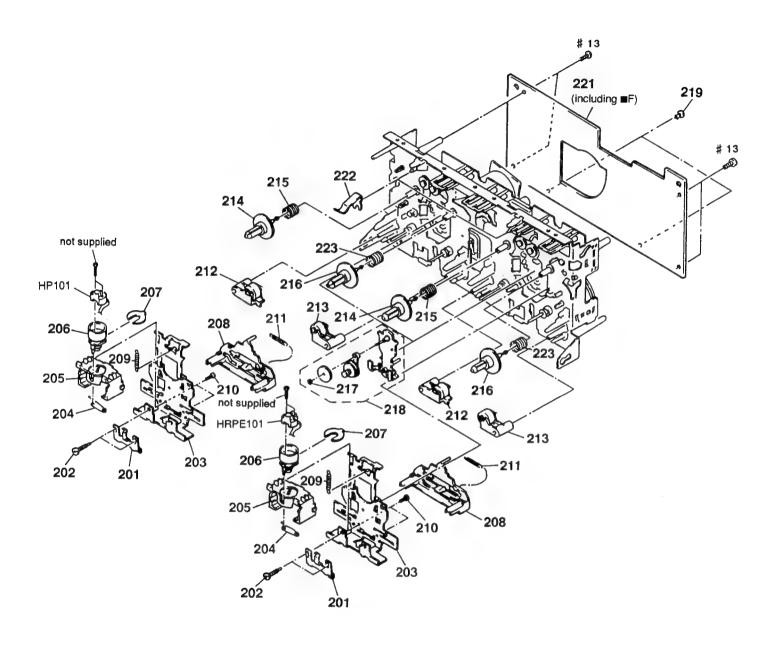
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101 102		LID (A) ASSY, CASSETTE LID (B) ASSY, CASSETTE		118	4-969-707-01	BUTTON (EJECT-R)	
103 104 * 105	4-969-683-01	KNOB (V) DISPLAY (ST)		119 120 121 * 122	4-969-705-01 X-4945-491-1	BUTTON (CD) ASSY INDICATOR (TC) BUTTON (TC) ASSY TC PANEL BOARD	
106 107	4-969-698-01	BUTTON (TIMER) INDICATOR (TA)		123		PANEL, FRONT (N300)	
108 109 * 110	4-969-693-01	BUTTON (PLAY) ASSY BUTTON (POWER) PANEL BOARD, COMPLETE (N30)	O:AEP, UK, G, IT)	123 124 * 125	4-955-744-01	PANEL, FRONT (N300K) KNOB (BA) (N300K) ECHO BOARD, COMPLETE (N300K)	
* 110 * 110		PANEL BOARD, COMPLETE (N30) PANEL BOARD, COMPLETE (N30)		* 126 * 127	1-654-620-11 4-949-935-21	MIC BOARD (N350K)	
111 112 113	4-970-713-01 4-969-676-01	INDICATOR (KARAOKE) (N300K) BUTTON (KARAOKE) (N300K) BUTTON (CURSOR 1)		* 128 129 130	1-575-906-31 4-951-620-01	HOLDER, FL TUBE WIRE, FLAT TYPE (15 CORE) SCREW (2. 6X8), +BVTP	
114 115	X-4945-530-1	BUTTON (CURSOR 2) BUTTON (ST) ASSY		* 131 * 132	1-654-648-11	CD PANEL BOARD OPEN/CLOSE BOARD	
116 117	4-969-669-31 4-969-706-01	BUTTON (FA) BUTTON (EJECT-L)		FL601	1-517-341-11	INDICATOR TUBE, FLUORESCENT	

7-4. TC MECHANISM SECTION 1 (TCM-220 WR2)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151 152 153 154 155	X-4943-775-1 4-959-231-11	HOLDER (L) ASSY, CASSETTE HOLDER (R) ASSY, CASSETTE SPRING (L), TORSION SPRING (R), TORSION DAMPER		* 156 157 * 158 * 159	3-354-957-01 3-354-953-01	FULCRUM, HOLDER JOINT (LOCK LEVER) LEVER (LOCK LEVER L) LEVER (LOCK LEVER R)	

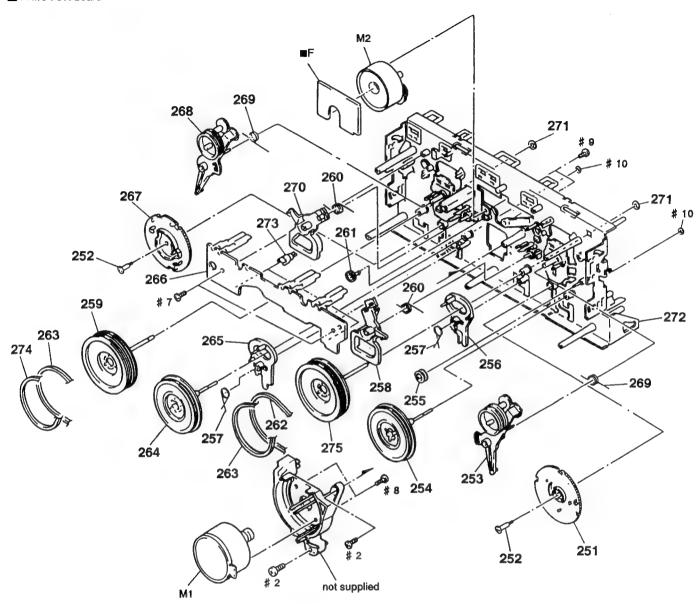
7-5. TC MECHANISM SECTION 2 (TCM-220 WR2)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201 202 * 203 204	3-919-684-01 X-3367-584-2	SPRING, AZIMUTH ADJUSTMENT SCREW, AZIMUTH ADJUSTMENT SLIDER (HEAD) ASSY SPRING, HEAD TOOGLE	:	213 214 215	3-908-613-01	PINCH LEVER (FWD) ASSY GEAR (S), REEL SPRING, COMPRESSION	
205		FITTING BLOCK, HEAD		216 217		REEL (T) ASSY WASHER (1.5), STOPPER	
206 * 207 208	3-908-559-01 3-908-555-01	ROTARY BLOCK, HEAD STOPPER, AZIMUTH SLIDER (REV SLIDER)		218 219 * 221	X-3370-173-1 3-911-116-21 A-2007-131-A		
209 210	3-388-848-01	SPRING, TENSION SCREW (P2X6) (B TIGHT)		222 223	3-917-142-01	DETENT, HALF SPRING, COMPRESSION	
211 212		SPRING, TENSION PINCH LEVER (REV) ASSY				HEAD, MAGNETIC (PLAYBACK) HEAD, MAGNETIC (REC/PB/ERASE)	

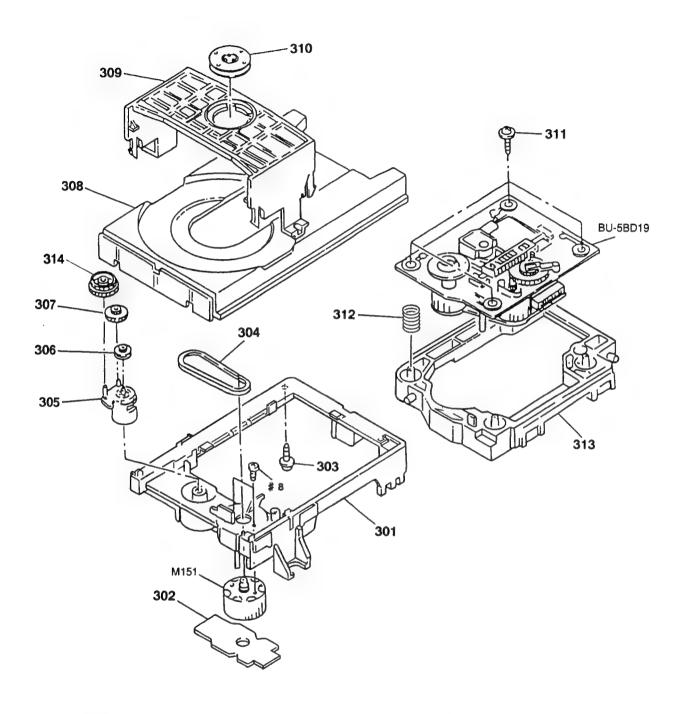
7-6. TC MECHANISM SECTION 3 (TCM-220 WR2)

F: MOTOR board



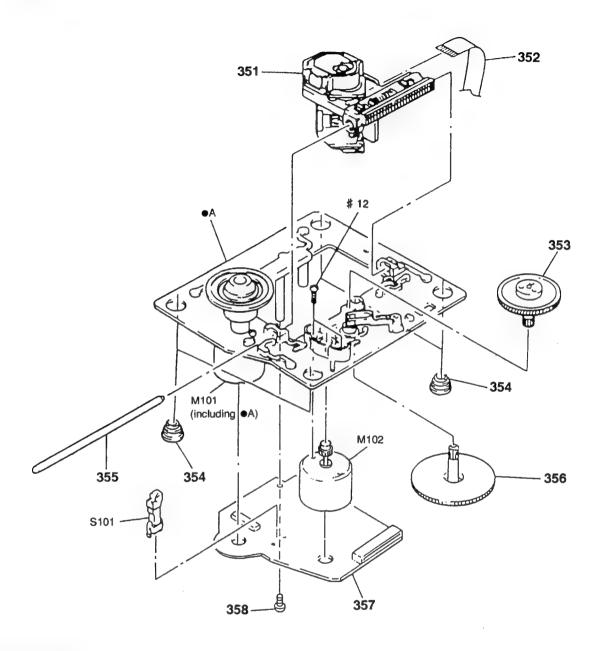
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
251	3-908-597-01			265	3-908-600-01	LEVER (REV-B)	
252 253 254 255	X-3370-169-1	ARM (A) ASSY, FR FLYWHEEL (AR) ASSY PULLEY, TENSION		* 266 267 268 269	3-908-598-01 X-3367-591-2	LEAF SWITCH BOARD CAM (B) ARM (B) ASSY, FR SPRING (FR), TORSION	
256 257		LEVER (REV-A) SPRING (REV LEVER), TORSION		270		LEVER (TRIGGER B)	
258 259 260	3-908-603-01 X-3370-170-1	LEVER (TRIGGER A) FLYWHEEL (BF) ASSY SPRING (TRIGGER), TORSION		271 272 * 273 274	X-3367-587-1	WASHER, STOPPER CHASSIS ASSY, MECHANICAL HOLDER (LED)	
261 262 263	3-908-609-01 3-913-845-01 3-913-846-01			274 275 M1	X-3370-172-1	FLYWHEEL (AF) ASSY MOTOR ASSY (CAPSTAN)	
264		FLYWHEEL (BR) ASSY		M2		MOTOR ASSY (TRIGGER)	

7-7. CD MECHANISM SECTION (CDM14-5BD19)



Ref.	No.	Part No.	Description	Re	emark	Ref. No.	Part No.	Description	Remark
30 30 30)2	1-645-721-11	CHASSIS (MD) LOADING BOARD BRACKET, YOKE				4-933-110-01 1-452-538-11		
30 30		4-927-649-01 4-933-109-01				312	4-959-996-01	SCREW (+PTPWH M2.6X6) SPRING (932), COMPRESSION	
30 30 30)7	4-927-651-01 4-967-268-01 4-933-112-01	GEAR (C)			314	4-933-129-01 4-933-107-12 A-4604-363-A		

7-8. BASE UNIT SECTION (BU-5BD19)



The components identified by mark $\hat{\Delta}$ or dotted line with mark $\hat{\Delta}$ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1 351 352 353 354 355 356	1-769-069-11 4-917-567-21 4-951-940-01 4-917-565-01	INSULATOR (BU)	-N)	M102	4-951-620-01 X-4917-523-4 X-4917-504-1	BD BOARD, COMPLETE SCREW (2.6X8), +BVTP MOTOR ASSY (SPINDLE) MOTOR ASSY (SLED) SWITCH, LEAF (LIMIT)	



SECTION 8 ELECTRICAL PARTS LIST

NOTE:

The components identified by mark \triangle or dotted line with mark \triangle are critical for safety.

Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS

All resistors are in ohms METAL: Metal-film resistor

METAL OXIDE: Metal Oxide-film resistor

F: nonflammable

SEMICONDUCTORS

In each case, u: μ , for example:

uA...: μ A..., uPA...: μ PA..., uPB...: μ PB..., uPC...: μ PC..., uPD...: μ PD...

CAPACITORS

uF: μF

• COILS $uH: \mu H$

Abbreviation

G : German model IT : Italian model EE : East European model EA : Saudi Arabia model

SP : Singapore model

MY : Malaysia model
AEP1 : AEP model without power source

for PS-LX56P

AEP2 : AEP model with power source

for PS-LX56P

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
*	A-4673-402-A	BD BOARD, COMPI	LETE			C139	1-163-235-11	CERAMIC CHIP	22PF	5%	50 V
		*********	***			C140	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
							art of the second secon	CERAMIC CHIP	0. 1uF		25V
		< CAPACITOR >				C142	1-163-038-91	CERAMIC CHIP	0. luF		25V
C101	1-126-607-11	ELECT CHIP	47uF	20%	4V	C145	1-135-201-11	TANTALUM CHIP	10uF	20%	4 V
C102	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V	C146	1-135-201-11	TANTALUM CHIP	10uF	20%	4 V
C103		CERAMIC CHIP	luF		16V	C147	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C105		CERAMIC CHIP	0. 1uF		25V	C148	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50 V
C106	1-164-695-11	CERAMIC CHIP	0. 0022uF	5%	50V	C149	1-164-346-11	CERAMIC CHIP	luF		16V
C107	1-164-695-11	CERAMIC CHIP	0. 0022uF	5%	50V	C153	1-135-259-11	TANTAL. CHIP	10uF	20%	6. 3V
C108	1-164-232-11	CERAMIC CHIP	0. 01uF		50V	C154	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C109		CERAMIC CHIP	0. 01uF		50V						
C110		CERAMIC CHIP	0. 033uF	10%	25V			< CONNECTOR >			
C111	1-163-038-91	CERAMIC CHIP	0. 1uF		25V						
								CONNECTOR, FFC			
C112		CERAMIC CHIP	0. luF		25V	CNU102	1-770-013-11	CONNECTOR, FFC	FPC 19P		
C113		CERAMIC CHIP	0. 0022uF	5%	50V						
C114		CERAMIC CHIP	0. 47uF		25V			< IC >			
C115	1-126-607-11		47uF	20%	4V						
C116	1-163-143-00	CERAMIC CHIP	0. 0012uF	5%	50V		8-752-069-56 8-759-291-06		` 1		
C117	1-164-005-11	CERAMIC CHIP	0. 47uF		25V		8-752-372-94				
C118	1-163-038-91		0. 1uF		25V		8-759-185-29		RT1		
	1-163-038-91		0. 1uF		25V		100 20	10 10 11 11 10 1			
C120	1-135-201-11	TANTALUM CHIP	10uF	20%	4V			< MOTOR >			
C121	1-163-038-91	CERAMIC CHIP	0. 1uF		25V						
						M101	X-4917-523-4	MOTOR ASSY (SPI	NDLE)		
C122	1-164-232-11	CERAMIC CHIP	0. 01uF		50V	M102	X-4917-504-1	MOTOR ASSY (SLE	(D)		
C123	1-163-038-91	CERAMIC CHIP	0. 1uF		25V						
C124	1-126-607-11	ELECT CHIP	47uF	20%	4V			< TRANSISTOR >			
C125	•	CERAMIC CHIP	0. 01uF		50V						
C126	1-163-038-91	CERAMIC CHIP	0. 1uF		25V	Q101	8-729-010-08	TRANSISTOR MS	B710-RT1		
						Q102	8-729-424-08		2111		
C127	1-164-695-11		0. 0022uF	5%	50V	Q103	8-729-421-22	TRANSISTOR UN	2211		
C128		CERAMIC CHIP	560PF	5%	50V						
C129		CERAMIC CHIP	0. 1uF		25V			< RESISTOR >			
	1-164-336-11		0. 33uF		25V						
C131	1-163-038-91	CERAMIC CHIP	0. 1uF		25V	R102	1-216-001-00		10 5%	1/10	W
0.00		00011110				R103	1-216-049-91		1K 5%	1/10	
C132		CERAMIC CHIP	0. 022uF	10%	25V		1-216-097-00		100K 5%	1/10	
C133	1-163-145-00		0. 0015uF	5%	50V		1-216-089-00		47K 5%	1/10	
C134		CERAMIC CHIP	luF		16V	R106	1-216-089-00	METAL CHIP	47K 5%	1/10	W
C135	1-163-117-00		100PF	5%	50V	D					
C136	1-164-005-11	CERAMIC CHIP	0. 47uF		25V		1-216-089-00		47K 5%	1/10	
C1 07	1 104 000 11	CEDANIC CHIE	0.01.15		FOU	R108	1-216-089-00		47K 5%	1/10	
C137	1-164-232-11	CERAMIC CHIP	0. 01uF		50V	R109	1-216-097-00	METAL CHIP	100K 5%	1/10	W

BD CD PANEL DBFB

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Descript	tion					Remark
R112 R113	1-216-077-00 1-216-077-00		15K 15K	5% 5%	1/10W 1/10W		RV103	1-241-396-11	RES, AD.	J, ME	TAL G	LAZE 22	2K		
KIIO			1011	370	1/10#				< SWITCH	H >					
R114 R115	1-216-101-00		150K 150K		1/10W 1/10W		S101	1-572-085-11	CWITCH	IFAF	(1 IM	IT)			
R116	1-216-061-00	METAL CHIP	3. 3K	5%	1/10W	,	5101	1 012 000 11			(LIM	11)			
R117 R118	1-216-093-00 1-216-049-91		68K 1K	5% 5%	1/10W 1/10W				< VIBRAT	TOR >					
							X101	1-579-280-11	VIBRATO	R, CRY	STAL	(16. 93	844MHz)		
R119 R120	1-216-121-00 1-216-089-00		1M 47K	5% 5%	1/10W 1/10W		 *******	******	******	*****	****	*****	*****	***	*****
R121	1-216-114-00	METAL GLAZE	510K		1/10W										
R122 R123	1-216-097-00 1-216-099-00		100K 120K		1/10W 1/10W		*	1-654-649-11	CD PANEL						
R124 R125	1-216-091-00 1-216-069-00		56K 6.8K	5% 5%	1/10W 1/10W				< DIODE	>					
R126	1-216-063-00		3. 9K		1/10W		D615	8-719-046-42	DIODE	SEL54	121E-	TH8F (N	1300)		
R127	1-216-089-00		47K		1/10W		D615	8-719-052-22				-TP (N3			
R128	1-216-105-91	METAL GLAZE	220K	5%	1/10W		D616	8-719-046-42				TH8F (N			
R129	1-216-049-91	METAL GLAZE	1K	5%	1/10W		D616	8-719-052-22	DIODE	SEL58	3420C	-TP (N3	300K)		
R130	1-216-079-00		18K	5%	1/10W				< TRANS	STOR	>				
R131	1-216-079-00	METAL CHIP	18K	5%	1/10W										
R132	1-216-061-00		3. 3K		1/10W		Q605	8-729-900-63			DTA1				
R133	1-216-061-00	METAL CHIP	3. 3K	5%	1/10W		Q606	8-729-119-78	TRANSIST	TOR	2SC2	785-HFE	(N300	K)	
R134	1-216-065-00		4.7K		1/10W				< RESIST	ror >					
R135	1-216-065-00		4. 7K		1/10W										
R136	1-216-073-00		10K	5%	1/10W		1	1-249-411-11			330	5%	1/4W	_	
R137 R138	1-216-065-00 1-216-049-91		4. 7K 1K	5% 5%	1/10W 1/10W		R643 R644	1-249-413-11 1-249-414-11			470	5%	1/4₩		
1/130	1 210 049 31	MLIAL OLAZE	11/1	3/4	1/10#		R645	1-249-414-11			560 820	5% 5%	1/4W 1/4W	F F	
R139	1-216-033-00	METAL CHIP	220	5%	1/10W			1-249-429-11			10K	5%	1/4W		(N300K)
R140	1-216-081-00	METAL CHIP	22K	5%	1/10\								,		(
R141	1-216-061-00		3. 3K	5%	1/10W			1-249-410-11			270	5%	1/4W		
R142	1-216-061-00		3. 3K		1/10W			1-249-410-11			270	5%	1/4W		(N300K)
R143	1-216-121-00	METAL CHIP	1M	5%	1/10W		R680 R681	1-249-410-11 1-249-410-11			270 270	5% 5%	1/4₩		(N300K)
R144	1-216-073-00	METAL CHIP	10K	5%	1/10W		1,001	1-245-410-11	CARDON		410	376	1/41	Г	(NOUN)
R145	1-216-097-00		100K		1/10W				< SWITCH	()					
R146	1-216-097-00		100K		1/10W										
R147	1-216-049-91		1K	5%	1/10₩			1-554-303-21							
R148	1-216-049-91	METAL GLAZE	1K	5%	1/10W		S635 S636	1-554-303-21 1-554-303-21					DE)		
R149	1-216-049-91	METAL GLAZE	1K	5%	1/10W		5000	1 004 000 21	OHIICH,	Incli	LL (I	W Lni)			
R150	1-216-037-00	METAL CHIP	330	5%	1/10W		******	*******	******	****	****	*****	*****	***	*****
R151	1-216-037-00		330	5%	1/10W										
R152	1-216-037-00		330	5%	1/10W		*	1-656-668-11		,					
R153	1-216-089-00	METAL CHIP	47K	5%	1/10W				******	****	****	k			
R154	1-216-065-00		4. 7K		1/10₩				< CAPACI	TOR >					
R156	1-216-081-00		22K	5% Fe/	1/10₩		00101	1 104 005 **	DI DOS			0.10	004		1001
R157 R158	1-216-069-00		6. 8K 10	5% 5%	1/10W 1/10W			1-124-925-11 1-136-165-00				2uF	20%		100V
W120	1 210-001-00	METAL CHIF	10	J/0	1/104			1-136-165-00				luF luF	5% 5%		50V 50V
		< VARIABLE RESI	STOR >					1-126-101-11)0uF	20%		16V
								1-126-101-11				00uF	20%		16V
		RES, ADJ, METAL					00100	1 104 000 00	DI DOM		_	47. 5	600		F011
KV 102	1-241-396-11	RES, ADJ, METAL	ULAZE	ZZK		ı	CZ133	1-124-902-00	ELECT		0.	47uF	20%		50V

DBFB ECHO

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Descriptio	<u>n</u>			Remark
C2152	1-124-925-11 1-136-165-00 1-136-165-00	FILM	0.	2uF 1uF 1uF	20% 5% 5%	100V 50V 50V		A-4377-149-A	ECHO BOARD				
(2133	1-130-105-00			Tur	3 <i>1</i> 0	3U Y			< CAPACITO	R >			
		< CONNECTOR	>				61601	1 104 005 11	DI DOM				
CN2101	1-564-506-11	PLUG CONNEC	ፐ/ነጽ ጓኮ)			1	1-124-925 - 11 1-124-443-00		2. 2uF 100uF	20% 20%	100V 10V	
	1-564-511-11)	1-164-159-11		0. 1uF	20%	50V	
							C1604	1-161-494-00	CERAMIC	0. 022uF		25V	
		< DIODE >					C1605	1-124-903-11	ELECT	luF	20%	50V	
D2101	8-719-987-63	DIODE 1N41	48M				C1606	1-130-475-00	MYLAR	0. 0022uF	5%	50V	
	8-719-000-78							1-162-302-11		0. 0022uF	20%	16V	
D2103	8-719-000-78	DIODE UZL-	7L2				C1608	1-130-493-00	MYLAR	0.068uF	5%	50V	
		(IC)						1-136-165-00		0. 1uF	5%	50V	
		< IC >					C1610	1-136-165-00	FILM	0. 1uF	5%	50V	
IC2101	8-759-634-51	IC M5218AP					C1611	1-124-477-11	ELECT	47uF	20%	25V	
								1-130-493-00		0.068uF	5%	50V	
		< TRANSISTOR	>					1-162-305-11		0. 0068uF		16V	
02101	8-729-119-78	TRANSISTOR	25027	85-HFF				1-130-480-00 1-124-903-11		0. 0056uF 1uF	5% 20%	50V 50V	
	8-729-119-78			85-HFE			01010	1 124 300 11	LULUI	Iur	20%	301	
Q2151	8-729-119-78	TRANSISTOR	2SC27	85-HFE			C1616	1-162-302-11	CERAMIC	0. 0022uF	20%	16V	
Q2152	8-729-119-78	TRANSISTOR	2SC27	85-HFE				1-124-903-11		1uF	20%	50V	
		< RESISTOR >						1-162-282-31		100PF	10%	50V	
		(RESISTOR >						1-162-282-31 1-162-294-31		100PF 0. 001uF	10% 10%	50V 50V	
R2101	1-249-437-11	CARBON	47K	5%	1/4₩		00000		OBIUMIO	0. 00141	10/0	301	
	1-247-807-31		100		1/4W			1-162-294-31		0.001uF	10%	50V	
	1-249-429-11 1-247-863-91		10K 22K		1/4W 1/4W			1-130-483-00		0. 01uF	5%	50V	
	1-247-903-91		22K		1/4W			1-124-925-11 1-162-290-31		2. 2uF 470PF	20% 10%	100V 50V	
	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			0,0	-, -,			1-162-290-31		470PF	10%	50V	
	1-249-419-11		1. 5K		1/4W F	·							
	1-247-895-00 1-249-437-11		470K 47K		1/4W 1/4W				< DIODE >				
	1-260-105-11		3. 3K		1/2W		D1601	8-719-987-63	DIODE 1N4	1148M			
R2132	1-260-105-11	CARBON	3. 3K	5%	1/2W								
R2133	1-249-429-11	CARRON	10K	5%	1/4W	İ			< IC >				
	1-249-429-11		10K		1/4W	l	IC1601	8-759-264-75	IC M65843	₹P			
	1-249-411-11			5%				8-759-634-51					
	1-249-441-11		100K		1/4W								
RZ131	1-247-903-00	CARBON	1M	5%	1/4W	ĺ			< COIL >				
R2151	1-249-437-11	CARBON	47K	5%	1/4W		L1601	1-410-521-11	INDUCTOR	100ul	ł		
	1-247-807-31		100		1/4₩	l							
	1-249-429-11		10K		1/4W				< TRANSISTO)R >			
	1-247-863-91 1-247-903-00		22K 1M		1/4W 1/4W		D1601	1_247_002_00	CADDON	1M C9	, ,	/ 4 307	
IVE TO O	1 21 303 00	CINDON	¥191	3/4	±/ ≇Π			1-247-903-00 1-249-431-11		1M 59 15K 59		L/4W L/4W	
	1-249-419-11		1. 5K		1/4W F			1-249-431-11		15K 59		1/4W	
	1-247-895-00		470K		1/4W			1-249-431-11		15K 59		1/4W	
KZ158	1-249-437-11	CARBON	47K	5%	1/4W		K1605	1-249-429-11	CARBON	10K 5%	5 1	/4W	
*******	******	*******	*****	*****	*****	******	R1606	1-247-863-91	CARBON	22K 5%	, 1	/4W	
							R1607	1-249-431-11	CARBON	15K 5%		./4₩	
							R1608	1-249-429-11	CARBON	10K 5%		/4W	
						I	K1609	1-249-431-11	CARBON	15K 5%	1	./4₩	

ECHO H.P KEY CON

Ref. No.	Part No.	Description	ı				Remark	Ref. No.	Part No.	Description					Remark
			-							 					
R1611	1-249-398-11	CARBON	27	5%	1/4W	F			1-136-165-00		0. luF	5%	507		
D1642	1 240 420-11	CADDON	10K	5%	1/4W				1-124-907-11 1-162-294-31		10uF 0. 001uF	20% 10%	50V 50V		
	1-249-429-11 1-249-431-11		15K		1/4W			C1401	1-102-254-31	CERAMIC	0. 001ur	10%	301		
	1-249-437-11	-	47K		1/4W			C1462	1-162-306-11	CERAMIC	0. 01uF	20%	16V		
	1-249-417-11		1K		1/4W	F			1-162-600-11		0. 0047uF	20%	167		
R1656	1-249-434-11	CARBON	27K	5%	1/4W				1-162-291-31		560PF	10%	50V		
								C1468	1-162-290-31	CERAMIC	470PF	10%	50V		
R1681	1-249-427-11	CARBON	6. 8K	5%	1/4W	F				. composos					
		/ WADIADIE	DECICTOR							< CONNECTOR	>				
		< VARIABLE	KESTSTO	\ /				± CN1401	1-568-834-11	SOCKET CON	NECTOR 1	SP.			
RV1601	1-241-903-11	RES. VAR. (CARBON 50)K				+ 0111101	1 000 004 11	OOCHEI, CON	inderon 1	<i>J</i> 1			
	1-241-903-11									< IC >					
		, . ,													
		< VIBRATOR	>					IC1401	8-759-634-51	IC M5218A	P				
					\				8-759-634-51						
X1601	1-527-978-00	OSCILLATOR,	, CERAMIC	(320)	Hz)				8-759-140-53						
***	******				*****			101404	8-759-260-30	IC M65840	SP				
******	********	*****	*****		*****	****	*****			< COIL >					
*	1-654-647-11	H. P BOARD								(COID)					
,		******						L1401	1-410-521-11	INDUCTOR	1000	ıН			
		< CAPACITOR	R >							< TRANSISTO	R >				
					. 00/	_		01.101							
	1-162-282-31		100		10%		V0V		8-729-900-80		DTC1141				
C1707	1-162-282-31	CERAMIC	100)Pr	10%	Ð	0V	Q140Z	8-729-900-80	1KAN51510K	DTC1141	25			
		< CONNECTOR	R >							< RESISTOR	>				
											*				
* CN1205	1-568-954-11	PIN, CONNEC	CTOR 5P					R1401	1-249-441-11	CARBON	100K 5	5%	1/4₩		
									1-249-441-11			5%	1/4W		
******	******	*******	*******	*****	*****	***	*****		1-249-435-11				1/4W		
	A 4077 151 A	KEN CON DO	ADD COME	DIETE (MODOK)				1-249-435-11				1/4₩		
	A-4377-151-A	********						K1405	1-249-435-11	CARDUN	33K 5	5%	1/4₩		
		*****	*******	,,,,,,,,,	*****			R1406	1-247-863-91	CARBON	22K 5	5%	1/4W		
		< CAPACITOR	R >						1-247-863-91				1/4W		
								R1408	1-247-863-91	CARBON	22K 5	5%	1/4W		
	1-130-491-00		0. 047uF	5%	50V				1-247-863-91				1/4W		
	1-124-907-11		10uF	20%	50V			R1410	1-249-429-11	CARBON	10K 5	5%	1/4₩		
	1-124-907-11 1-124-907-11		10uF 10uF	20% 20%	50V 50V			D1411	1-247-903-00	CADRON	1M 5	:0/	1/4W		
	1-124-907-11		10uF	20%	50V				1-247-863-91				1/4W		
C1403	1 124 307 11	LLLCI	Tour	2070	501				1-247-863-91				1/4W		
C1406	1-124-907-11	ELECT	10uF	20%	50V				1-249-441-11				1/4W		
	1-130-493-00		0.068uF	5%	50V				1-249-441-11				1/4W		
	1-130-493-00		0. 068uF	5%	50V										
	1-130-493-00		0. 068uF	5%	50V				1-249-429-11				1/4W		
C1434	1-162-211-31	CERAMIC	33PF	5%	50V				1-249-417-11				1/4W	F	
C1 125	1-162-211-31	CEDAMIC	33PF	5%	50V				1-249-429-11 1-249-417-11				1/4W 1/4W	E	
	1-162-211-31		47uF	20%	107				1-249-417-11				1/4W	Г	
	1-164-159-11		0. 1uF	SUM	50V			114763	2 0 10 100 11	O. III LDON	TOIL C	,,,	A/ 74 H		
	1-124-443-00		100uF	20%	100			R1431	1-259-884-11	CARBON	4.7M 5	5%	1/4W		
	1-124-907-11		10uF	20%	50V			R1434	1-247-903-00	CARBON			1/4W		
									1-247-807-31				1/4W		
	1-136-165-00		0. 1uF	5%	50V				1-247-807-31				1/4W		
C1446	1-136-165-00	FILM	0. 1uF	5 %	50V			K1438	1-247-807-31	CAKBON	100 5	5%	1/4₩		

KEY CON LEAF SWITCH LOADING MAIN

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description		Remark
R1449	1-249-429-11 1-249-429-11 1-249-441-11	CARBON		% 1.	/4W /4W /4W			1-645-721-11	LOADING BOARD		
R1451	1-249-429-11	CARBON		% 1.	/4W /4W F				< CONNECTOR >		
	1-249-429-11		10K 5		/4W		* CN151	1-568-943-11	PIN, CONNECTOR	5P	
R1457	1-249-424-11	CARBON	3. 9K 5	% 1,	/4W F /4W				< SWITCH >		
R1459	1-249-429-11 1-247-863-91	CARBON	10K 5 22K 5	% 1,	/4W /4W				SWITCH, LEAF (
		< VIBRATOR >					******	******	********	***********	*****
X1101	1-567-927-11	VIBLATOR, CE	RAMIC (1	6MHz)			*	A-4377-116-A	MAIN BOARD, CO	MPLETE (N300:AE	
	********			*****	*****	******	*	A-4377-140-A	MAIN BOARD, CO	MPLETE (N300K:E	
*		LEAF SWITCH I					*	A-4377-461-A	MAIN BOARD, COI	MPLETE (N300:AE	
*	3-381-776-01	<pre>< CONNECTOR :</pre>	>				*	A-4377-599-A	MAIN BOARD, CO!	MPLETE (N300:CI	
* CN1001	1-568-854-11	SOCKET, CONNE	ECTOR 11	P			*	A-4377-607-A	MAIN BOARD, CO		,
		< TRANSISTOR	>					A 4977 C90 A			
	8-719-710-02 8-719-710-02		PHOTO RI				*	A-4311-03U-A	MAIN BOARD, CO	MPLEIE (N3UU:G) ***********	
		< RESISTOR >					*	A-4377-632-A	MAIN BOARD, COM		
R1002	1-249-412-11 1-249-412-11 1-249-414-11	CARBON	390 390 560	5% 5% 5%	1/4W 1/4W 1/4W	F	*	A-4377-635-A	MAIN BOARD, CON		*
R1004	1-247-834-11 1-247-818-11	CARBON	1. 3K 300		1/4W 1/4W	•			< CAPACITOR >		
		< SWITCH >					C1 C2	1-162-306-11 1-124-477-11		01uF 30% /uF 20%	16V 25V EP, UK, G, IT)
	1-692-832-11						C2	1-126-934-11		20uF 20%	16V
	1-692-832-11 1-572-248-11				()	:	C3 C4	1-162-306-11 1-162-306-11		01uF 30% 01uF 30%	16V 16V
S1004	1-571-281-21	SWITCH, LEAF	(A CrO2)								
51005	1-571-281-21	SWITCH, LEAF	(REC A)				C5 C6	1-162-306-11 1-162-306-11	-	01uF : 30% 01uF : 30%	16V 16V
	1-572-248-11						C7	1-162-306-11	CERAMIC 0.	01uF 30%	16V
	1-571-281-21 1-571-281-21						C8 C9	1-162-306-11 1-101-004-00		01uF 30% 01uF	16V
	*****				*****			101 004-00	CERTAIN U.		50V CIS/N300K)
*****	*********	*****	*******	*****	*****	******	C11	1-162-306-11	CERAMIC 0.	01uF 30%	16V
								1-124-477-11		uF 20%	25V
							C12	1-126-934-11	ELECT 22	(N300: AI OuF 20%	EP, UK, G, IT) 16V
							C13	1-162-306-11		01uF 30%	16V
						I	C14	1-162-306-11	CERAMIC 0.	01uF 30%	16V



Ref. No.	Part No.	Description			Ren	mark	Ref. No.	Part No.	Description			Remark
CIE	1 104 150 11	CEDANIC	0 115		FOV	- 1	CAO	1 100 200 11	CEDANIC	0.010	200/	1037
C15 C16	1-164-159-11 1-124-907-11		0. 1uF 10uF	20%	50V 50V		C49	1-162-306-11	CERAMIC	0. 01uF	30%	16V (N300K:EA)
C10	1-124-902-00		0. 47uF	20%	50V		C51	1-164-031-11	CERAMIC	33PF	5%	50V
C18	1-124-903-11		luF	20%	50V		C52	1-164-027-11		22PF	5%	50V
C19	1-124-903-11		luF	20%	50V		CUL	1 104 027 11	CLIMMIC	2211	JA	301
013	1 124 500 11	BBBCI	Tui	20%	507	1	C53	1-162-306-11	CERAMIC	0. 01uF	30%	16V
C20	1-124-907-11	ELECT	10uF	20%	50V	ŀ	C54	1-124-477-11		47uF	20%	25V
C21	1-124-907-11		10uF	20%	50V		C55	1-162-294-31		0.001uF	10%	50V
C22	1-124-907-11		10uF	20%	50V		C56	1-162-306-11		0. 01uF	30%	16V
C23	1-124-907-11		10uF	20%	50V		C57	1-162-306-11		0. 01uF	30%	16V
C24	1-137-436-11	-	0. 0039uF	5%	50V (N3	300)	001	. 100 000 11	OBIGINITO	o. orac	00%	101
						/	C58	1-162-306-11	CERAMIC	0. 01uF	30%	16V
C25	1-137-436-11	FILM	0.0039uF	5%	50V (N3	300)	C61	1-124-925-11		2. 2uF	20%	100V
C26	1-136-158-00		0. 027uF	5%	50V	·	C62	1-164-159-11		0. 1uF		50V
			(N300:EE	CIS/N30	00K)	C63	1-162-306-11	CERAMIC	0.01uF	30%	16V
C26	1-136-160-00	FILM	0. 039uF	5%	50V		C68	1-162-306-11	CERAMIC	0.01uF	30%	16V
				(N300:A	EP, UK, G,	, IT)						
C27	1-136-158-00	FILM	0. 027uF	5%	50V		C69	1-126-934-11	ELECT	220uF	20%	16V
			(N300:EE	, CIS/N30	00K)	C71	1-136-173-00	FILM	0. 47uF	5%	50V
C27	1-136-160-00	FILM	0. 039uF	5%	50V					(N	300:AEP,	UK, EE, CIS)
				(N300:A	EP, UK, G,	, IT)	C72	1-161-494-00	CERAMIC	0.022uF		25V
										(N	300:AEP,	UK, EE, CIS)
C28	1-124-903-11		luF	20%	50V		C73	1-161-494-00	CERAMIC	0. 022uF		25V
C29	1-162-294-31		0.001uF	10%	50V					(N	300:AEP,	UK, EE, CIS)
C30	1-162-600-11		0. 0047uF	30%	16V		C95	1-124-907-11	ELECT	10uF	20%	50 V
C31	1-124-477-11		47uF	20%	25V							(N300:CIS)
C32	1-126-962-11	ELECT	3. 3uF	20%	50V							
							C96	1-124-907-11	ELECT	10uF	20%	50V
C33	1-162-306-11		0. 01uF	30%	16V							(N300:CIS)
C34	1-126-933-11		100uF	20%	107		C701	1-137-368-11		0.0047uF	5%	50V
C35	1-162-306-11		0. 01uF	30%	16V		C702	1-162-290-31		470PF	10%	50V
C37	1-162-199-31	CERAMIC	10PF	5%	50V	74	C703	1-137-399-11		0. luF	5%	50V (N300)
000	1 100 011 01	CDDANIC	2000	FW	(N300K:	:EA)	C705	1-124-903-11	ELECT	1uF	20%	50V
C38	1-162-211-31	CERAMIC	33PF	5% (N200 - A	50V	IT)	CZOC	1 104 000 00	DI DOT	0 47 5	0.00	E017
				(NOUU: A	EP, UK, G,	11)	C706	1-124-902-00		0. 47uF	20%	50V
C39	1-162-195-31	CEDAMIC	4. 7PF	10%	50V		C707 C710	1-124-907-11 1-124-907-11		10uF	20%	50V
Cos	1-102-153-31	CERAMIC	4. 111	10%	(N300K:	·FA)	C711	1-124-907-11		10uF luF		50V 50V
C40	1-101-005-00	CERAMIC	22000PF		50V	·Ln)	C712	1-124-443-00		100uF		10V
C41	1-164-159-11		0. 1uF		50V		C/12	1 124 445-00	ELECT	Toour	20/0	104
041	1 104 100 11		N300: AEP, U	K FF CI		·FA)	C801	1-137-368-11	FILM	0.0047uF	5%	50V
C42	1-162-196-31		5. 6PF	10%	50V	. []	C802	1-162-290-31		470PF		50V
012	1 105 100 01	OBITIMITE.			, UK, EE, C	CIS)	C803	1-137-399-11		0. 1uF		50V (N300)
C42	1-162-198-31	CERAMIC	8. 2PF	10%	50V	,	C805	1-124-903-11		luF		50V (11000)
0.10	1 102 100 01	02			G, IT/N30	00K)	C806	1-124-902-00		0. 47uF		50V
					-,,	,				01 11 41	2070	001
C43	1-162-306-11	CERAMIC	0. 01uF	30%	16V	İ	C807	1-124-907-11	ELECT	10uF	20%	50V
C44	1-102-120-00	CERAMIC	0. 0018uF		50V		C810	1-124-907-11		10uF		50V
			(N	300:AEP	, UK, EE, C	CIS)	C811	1-124-903-11	ELECT	1uF	20%	50V
C45	1-162-301-11	CERAMIC	0.0015uF	30%	16V		C812	1-124-443-00	ELECT	100uF	20%	10V
			(N	300:AEP	, UK, EE, C	CIS)	C901	1-164-159-11	CERAMIC	0. luF		50V
C46	1-101-005-00	CERAMIC	22000PF		50V							
			(N	300:AEP	, UK, EE, C	CIS)	C902	1-164-159-11	CERAMIC	0. luF		50V
C46	1-101-006-00	CERAMIC	0. 047uF		50V		C903	1-164-159-11		0. 1uF		50V
					(N300K:	EA)	C906	1-126-101-11		100uF	20%	16V
								1-162-288-31		330PF		50V (N300)
C47	1-136-162-00	FILM	0. 056uF	5%	50V	_	C1003	1-162-282-31	CERAMIC	100PF	10%	50V
					(N300K:	:EA)						
C48	1-164-159-11	CERAMIC	0. 1uF		50V			1-162-282-31		100PF		50Y
					(N300K:	EA)	C1005	1-124-927-11	ELECT	4. 7uF	20%	100V

MAIN

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description				Remark
C1006	1-162-600-11	CERAMIC	0. 0047uF	30%	167		C1299	1-137-375-11	FILM	0. 068uF	5%	50V	(N300)
	1-162-301-11		0.0015uF	30%	16V		C1300	1-162-294-31	CERAMIC	0.001uF	10%		(N300)
C1008	1-124-902-00	ELECT	0. 47uF	20%	50V		C1301	1-136-169-00	FILM	0. 22uF	5%	50V	
C1000	1-126-803-11	FIFCT	47uF	20%	10V	(N300)	C1302	1-136-169-00	EHM	0. 22uF	5%	50V	
	1-162-306-11		0. 01uF	30%	167	(11000)		1-126-974-11		3300uF	20%	50V	
	1-162-286-21		220PF	10%		(N300)		1-126-974-11		3300uF	20%	50V	
C1033	1-124-907-11	ELECT	10uF	20%	50V			1-126-105-11		1000uF	20%	35V	
C1034	1-124-907-11	ELECT	10uF	20%	50V		C1306	1-124-477-11	ELECT	47uF	20%	25V	
C1049	1-124-907-11	ELECT	10uF	20%	50V		C1307	1-124-477-11	ELECT	47uF	20%	25V	
C1051	1-162-288-31	CERAMIC	330PF	10%	50V	(N300)		1-124-122-11		100uF	20%	50V	
C1053	1-162-282-31	CERAMIC	100PF	10%	50V		C1322	1-124-122-11	ELECT	100uF	20%	50V	
	1-162-282-31		100PF	10%	50V			1-124-907-11		10uF	20%	50V	
C1055	1-124-927-11	ELECT	4. 7uF	20%	100V	1	C1327	1-124-907-11	ELECT	10uF	20%	50V	
C1056	1-162-600-11	CERAMIC	0. 0047uF	30%	16V		C1331	1-136-165-00	FILM	0. IuF	5%	50V	
	1-162-301-11		0. 0015uF	30%	16V			1-136-165-00		0. luF	5%	50V	
	1-124-902-00		0. 47uF	20%	50V		C1333	1-126-946-11	ELECT	6800uF	20%	25V	
	1-126-803-11		47uF	20%		(N300)		1-124-636-00		3300uF	20%	25V	
C1060	1-162-306-11	CERAMIC	0. 01uF	30%	16V		C1341	1-124-907-11	ELECT	10uF	20%	50V	
C1071	1-162-286-21	CERAMIC	220PF	10%	50V	(N300)	C1342	1-124-902-00	ELECT	0. 47uF	20%	50V	
	1-124-907-11		10uF	20%	50V		C1343	1-124-903-11	ELECT	1uF	20%	50V	
	1-137-440-11		0. 018uF	5%	50V			1-162-306-11		0.01uF	30%	16V	
	1-124-903-11		luF	20%	50V			1-124-907-11		10uF	20%	50V	
C1103	1-162-302-11	CERAMIC	0. 0022uF	30%	16V		C1361	1-126-176-11	ELECT	220uF	20%	10V	
C1104	1-137-443-11	FILM	0. 056uF	5%	50V		C1362	1-126-176-11	ELECT	220uF	20%	10V	
	1-162-600-11			30%	167			1-126-925-11		470uF	20%	10V	
	1-136-171-00		0. 33uF	5%	50V	İ	C1371	1-124-477-11	ELECT	47uF	20%	25V	
	1-136-169-00 1-124-907-11		0. 22uF 10uF	5% 20%	50V 50V		C127E	1 194 007 11	E! ECT	100			P2, UK)
CIISI	1-124-907-11	ELECI	lour	20%	301			1-124-907-11 1-126-803-11		10uF 47uF	20% 20%	50V 10V	
C1133	1-162-306-11	CERAMIC	0. 01uF	30%	16V	l	01010	1 120 000 11		7106	2070	101	
C1136	1-164-159-11	CERAMIC	0. 1uF		50V		C1381	1-124-898-11	ELECT	4700uF	20%	16V	
	1-164-159-11		0. 1uF		50V			1-124-471-00		1000uF	20%	6.3V	
	1-137-440-11		0. 018uF	5%	50V			1-162-294-31		0. 001uF	10%	50V	
C1152	1-124-903-11	ELECT	luF	20%	50V			1-124-477-11		47uF	20%	25V	
C1153	1-162-302-11	CERAMIC	0. 0022uF	30%	16V		C1300	1-136-165-00	LILM	0. 1uF	5%	50V	
	1-137-443-11			5%	507		C1507	1-162-294-31	CERAMIC	0.001uF	10%	50V	
	1-162-600-11		0. 0047uF				C1511	1-102-947-00	CERAMIC	10PF	5%	50V	
	1-136-171-00			5%	50V			1-102-947-00		10PF		50V	
C1157	1-136-169-00	FILM	0. 22uF	5%	50V	İ		1-162-290-31		470PF		50V	
C1161	1-164-159-11	CERAMIC	0. 1uF		50V		C1705	1-137-368-11	FILM	0. 0047uF	5%	50V	
	1-124-907-11			20%	50V		C1755	1-137-368-11	FILM	0. 0047uF	5%	50V	
	1-162-306-11			30%	16V	İ		1-124-907-11		10uF		50V	
	1-124-907-11		10uF	20%	50V			1-162-306-11		0. 01uF		16V	
C1221	1-124-443-00	ELECT	100uF	20%	10V			1-124-925-11		2. 2uF		1007	
C1999	1-126-176-11	EI ECT	220uF	204	107		C1901	1-162-306-11	CERAMIC	0. 01uF	30%	16V	
	1-126-176-11			20% 20%	10V 10V		C1902	1-137-372-11	FIIM	0. 022uF	5%	50V	
	1-124-925-11			20%	1007		C1302	1 10: 312-11	LILW	v. v&&ur	J/0	704	
	1-137-375-11			5%		(N300)			< FILTER >				
C1249	1-137-375-11	FILM	0.068uF	5%	50V	(N300)	on:						
C1250	1-162-294-31	CEDAMIC	0. 001uF	10%	50V	(N300)		1-567-389-11	•				
	1-102-294-31			10% 5%		(N300)	Cr2	1-760-393-11	rilien, CERAM		z (N300: AE	P. UK. (G, IT)
						. •						,,	

MAIN

F	Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Descri	ption		Remark
	CF3	1-567-389-11	FILTER, CERA	MIC 10.7MHz (N300:EE, CI	S/N300K)		8-719-200-82 8-719-200-82		11ES2 11ES2	(N300: AEP2, UK)	
	CF3	1-760-393-11	FILTER, CERA			ŀ	8-719-200-82			(N300: AEP2, UK)	
	CF4	1-760-220-11	FILTER, CERAI		July 24 2 2 7	D1373	8-719-200-82 8-719-200-82	DIODE	11ES2	(N300: AEP2, UK) (N300: AEP2, UK)	
	CF5 CF6		FILTER, CERAL	MIC 450kHz CERAMIC 456kHz		D1375	8-719-200-82 8-719-200-82	DIODE		(NOOVINE E, OK)	
	OI V	1 017 010 11	< CONNECTOR				8-719-200-82		11ES2		
	CMI	1 750 419 11		FC/FPC 13P (N300:CIS)	D1378	8-719-200-82 8-719-200-82	DIODE	11ES2 11ES2		
	CN1 CN901		SOCKET, CONNI		,		8-719-200-82		11ES2		
			SOCKET, CONNI				8-719-200-82		11ES2		
			PIN, CONNECTO				0 110 000 02	21022	11200		
			PIN, CONNECTO			D1501	8-719-200-82	DIODE	11ES2		
							8-719-987-63		1N4148	8M	
	* CN1006	1-568-834-11	SOCKET, CONN	ECTOR 15P (N300K)			8-719-200-82		11ES2		
	* CN1301	1-564-512-11	PLUG, CONNECT	FOR 9P			8-719-987-63		1N4148		
			PLUG, CONNECT	IOK 6P OR 3P (N300:AEP2,UK)		D1521	8-719-987-63	DIODE	1N4148	SM	
			SOCKET, CONNI	, , ,		D1525	8-719-987-63	DIODE	1N4148	RM	
	+ CN1001	1 300 004 11	DOCKET, CONTR	5010K 101			8-719-987-63		1N4148		
	CN1701	1-770-067-11	CONNECTOR, FI	FC/FPC 19P			8-719-987-63		1N4148		
			PIN, CONNECTO				8-719-010-33		UZ-4.	7BSB-TA	
			< TRIMMER >					< FRON	TEND >		
	CT1	1-141-227-00	CAP, TRIMMER	20PF (N300K:EA)		FE1	1-693-090-51	FRONT	END (FM)	(2 GANG) (N300K)	
	CT2		CAP, TRIMMER			FE1 FE1	1-693-217-11	FRONT	END (4 (GANG) (N300:AEP, UK, (GANG) (N300:EE, CIS)	G, IT)
			< DIODE >					< IC >		, , , , , , , , , , , , , , , , , , , ,	
	D1	8-719-987-63	DIODE 1N41	18M							
	D2	8-719-987-63		18M (N300:CIS)		IC1	8-759-200-60		A7060AP	(N300: AEP, UK, G, IT))
	D3	8-719-987-63		18M (N300:CIS)		IC2	8-759-200-60			(N300: AEP, UK, G, IT))
	D5	8-719-976-30		GON (N3OOK:EA)		IC3	8-759-176-03		A1835		
	D901	8-719-933-54	DIODE HZS9	AZL		IC51	8-759-288-54 8-759-289-38		C72130	(N300)	
	D1204	8-719-987-63	DIODE 1N41	18M		10301	5 100 200 00	10 fl		(11000)	
		8-719-987-63				IC901	8-759-289-39	IC H	A12196N7	(N300K)	
		8-719-028-23		120-4101			8-759-822-09		B1641		
		8-719-001-43		I 1M1-TA			8-759-634-51		5218AP		
	D1309	8-719-987-63	DIODE 1N41	18M		1	8-759-000-48		C14052B0		
	D1210	8-710-097-69	DIONE INAL	IRM		L 1C1003	8-759-140-53	IC ul	PD4053B0		
		8-719-987-63 8-719-200-82				ICIOSI	8-759-335-99	TC TI	MP87CP64	IF.	
		8-719-200-82					8-759-291-98		62423FP	ŧr.	
		8-719-200-82				ž.	8-759-281-42		C9210P		
		8-719-934-18				IC1202	8-759-111-68	IC ul	PC1237HA	1	
	D1 221	8-719-200-02	DIODE 10E2			IC1241	8-759-820-13	IC I	78MR06		
		8-719-200-02					8-759-604-30		5F7808		
		8-719-200-02					8-759-269-92			IANS-E20	
		8-719-200-02					8-759-822-09			J	
	D1341	8-719-987-63	DIODE 1N414	18M				, rr.m -			
	D1361	8-719-987-63	DIODE 1N414	8M				< IFT :	>		
		8-719-987-63				IFT1	1-409-636-11	TRANSFO	ORMER. I	F (CERAMIC FILTER)	
		8-719-200-82					000 44	3		- (January Trainity	

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description			Remark
·		< JACK >		Q912	8-729-900-65	TRANSISTOR	DTA144E	S	
* J1001	1-580-912-11	JACK, PIN 4P (PHONO IN/VIDEO IN)		Q1002 Q1003	8-729-900-80 8-729-900-80 8-729-900-80	TRANSISTOR TRANSISTOR	DTC114E DTC114E DTC114E		
L1 L1	1-407-500-00 1-410-688-31	INDUCTOR 1. 5mH (N300:G, IT/N300I	K)		8-729-900-80 8-729-119-78		DTC114E 2SC2785		
L2 L31 L1201	1-410-336-11 1-414-142-11 1-420-872-00			Q1103 Q1151	8-729-119-78 8-729-900-63 8-729-119-78 8-729-119-78	TRANSISTOR TRANSISTOR	2SC2785 DTA124E 2SC2785	S -HFE	
	1-420-872-00 1-410-509-11	COIL, AIR-CORE (N300) INDUCTOR 10uH		1	8-729-900-63		2SC2785 DTA124E		
		< LOW PASS FILTER >		Q1206	8-729-900-36 8-729-900-36 8-729-111-29	TRANSISTOR	DTC124E DTC124E 2SD1616	S	
LPF1 LPF2		FILTER, LOW PASS (N300) FILTER, LOW PASS (N300)		Q1303	8-729-900-36 8-729-118-00	TRANSISTOR	DTC124E 2SB1116	S	
		< TRANSISTOR >			8-729-118-00 8-729-118-00		2SB1116		
Q1	8-729-230-99	(N300:EE, CIS	S/N300K)	Q1501	8-729-900-36 8-729-119-78	TRANSISTOR	DTC124E 2SC2785	-HFE	
Q2 Q3	8-729-230-99 8-729-230-99	(N300:EE, CIS	S/N300K)		8-729-119-76 8-729-119-78		2SA1175		
Q 4	8-729-230-99	(N300:EE, CIS	S/N300K)	Q1001	0-125-115-10	< RESISTOR >	2002100	-AFE	
Q5	8-729-422-57	TRANSISTOR UN4111 (N300:EE, CIS	S/N300K)	R1	1-249-411-11	CARBON	330 59	% 1/4W	
Q6	8-729-119-76	TRANSISTOR 2SA1175-HFE (N300:AEP, UK, EE, CIS/N3	SOOK • EA)	R2	1-249-411-11	CARBON	330 59	6 1/4W	P, UK, G, IT)
Q7	8-729-119-76		,		1-249-401-11 1-249-411-11		47 59 330 59	% 1/4₩	P, UK, G, IT) F
Q8	8-729-900-80	(N300: AEP, UK, EE, CIS/N3	300K:EA)	R6	1-247-863-91		22K 59	6 1/4W	
Q9 Q10	8-729-900-80 8-729-900-80	(N300: AEP, UK, EE, CIS/N3	300K:EA)	R7 R8	1-249-411-11 1-249-411-11		330 59 330 59		CTC (NOODV)
410	0 120 000 00	(N300: AEP, UK, EE, CIS/N3	300K:EA)	R9 R10	1-247-863-91 1-249-411-11		22K 59	6 1/4W	.13/N3UUN)
Q11	8-729-900-80	(N300: AEP, UK, EE, CIS/N3	00K:EA)	R11	1-247-863-91		22K 59	6 1/4W	
Q701 Q801 Q901	8-729-119-78 8-729-119-78 8-729-119-78	TRANSISTOR 2SC2785-HFE		R12 R13	1-249-411-11 1-249-411-11		330 59 330 59		TS/N300K)
Q902	8-729-900-65	TRANSISTOR DTA144ES		R14 <u>∱</u> R15	1-247-863-91 1-249-405-11		22K 59 100 59	1/4W	
Q903 Q904	8-729-801-93 8-729-116-83	TRANSISTOR 2SD1616-K(N300:AEP, U		R16	1-249-442-11		510 5%		
Q905 Q906 Q907	8-729-116-83 8-729-900-80 8-729-422-57	TRANSISTOR DTC114ES	A, G, 11)		1-249-403-11 1-249-423-11 1-249-441-11	CARBON	68 5% 3. 3K 5% 100K 5%	1/4W	
Q908	8-729-119-76	TRANSISTOR 2SA1175-HFE		R20	1-249-429-11 1-249-425-11	CARBON	10K 5% 4.7K 5%	1/4W	F
Q909 Q910 Q911	8-729-900-80 8-729-900-65 8-729-900-65	TRANSISTOR DTA144ES			1-249-425-11 1-249-425-11		4. 7K 5% 4. 7K 5%	1/4₩	F

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.

Replace only with part number specified.



Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description				Remark
D0.4	1-249-425-11	CADDON	4. 7K	E0/	1/4W F	R702	1-249-431-11	CADDON	15K	5%	1/4W	
R24 R25	1-249-425-11		10K	5%	1/4W F	K102	1-249-431-11	CARDON	101	Ð76	1/4#	
R26	1-249-429-11		10K	5%	1/4W	R703	1-215-451-00	METAL	18K	1%	1/4W	(N300)
	1 0.0				(, EE, CIS/N300K:EA)		1-249-428-11		8. 2K		1/4W	
						R705	1-249-425-11		4. 7K		1/4W	
R40	1-249-395-11	CARBON	15	5%	1/4W F	R706	1-249-429-11		10K	5%	1/4W	
					(N300K:EA)	R707	1-249-429-11	CARBON	10K	5%	1/4W	
R40	1-249-399-11	CARBON	33	5%	1/4W F							
					300/N300K:E, MY, SP)	1	1-249-429-11		10K	5%	1/4W	
R41	1-249-429-11		10K	5%	1/4W	R709	1-249-429-11		10K	5%	1/4W	
D.10	1 040 400 11				K, EE, CIS/N300K:EA)	1	1-249-429-11		10K	5%	1/4W	
R42	1-249-429-11			5%	1/4W	R711	1-249-429-11		10K	5%	1/4W	
R43	1-240-447-11		100K		K, EE, CIS/N300K:EA) 1/4W	R712	1-249-429-11	CARDON	10K	5%	1/4₩	
R43	1-249-441-11	CARDON	1000	3/6	1/4#	R713	1-249-429-11	CAPRON	10K	5%	1/4₩	
R44	1-249-425-11	CARRON	4. 7K	5%	1/4W F	R714	1-249-420-11		1. 8K		1/4W	F
1177	1 243 425 11				K, EE, CIS/N300K:EA)		1-247-863-91		22K	5%	1/4W	1
R45	1-249-437-11		47K	5%	1/4W	R716	1-249-421-11		2. 2K		1/4W	F
R46	1-247-903-00		1M	5%	1/4W	R717	1-249-428-11		8. 2K		1/4W	
				(N3	300: AEP, UK, EE, CIS)							
R47	1-247-863-91	CARBON	22K	5%	1/4W	R718	1-249-417-11		1K	5%	1/4₩	F
					300: AEP, UK, EE, CIS)	1	1-249-430-11		12K	5%	1/4W	
R47	1-249-433-11	CARBON	22K	5%	1/4W (N300K:EA)		1-249-431-11		15K	5%	1/4W	
D (0		CARRON	111	E0/	1 /48 /10001/ 104	R804	1-249-428-11		8. 2K		1/4W	
R48	1-247-903-00		1M	5% 5%	1/4W (N300K:EA)	R805	1-249-425-11	CARBON	4. 7K	5%	1/4W	F
R48	1-249-437-11	CARDON	47K		1/4W 800:AEP, UK, EE, CIS)	R806	1-247-882-11	CADDON	130K	E9/	1 / AW	
<u></u> ∱R50	1-249-401-11	CARRON	47	5%	1/4W F	R807	1-247-866-11		30K	5%	1/4W 1/4W	
R51	1-249-423-11		3. 3K	5%	1/4W F	R808	1-247-864-11		24K	5%	1/4W	
R52	1-249-429-11		10K	5%	1/4W	R809	1-249-429-11		10K	5%		(N300)
					_,	R814	1-249-420-11		1. 8K	5%	1/4W	
R53	1-249-429-11	CARBON	10K	5%	1/4W	1						
R55	1-249-429-11	CARBON	10K	5%	1/4W	R815	1-247-863-91	CARBON	22K	5%	1/4₩	
R56	1-249-417-11		1K	5%	1/4W F	R816	1-249-421-11		2. 2K	5%	1/4W	
					K, EE, CIS/N300K:EA)		1-249-428-11		8. 2K		1/4W	
R57	1-249-429-11		10K	5%	1/4₩	R818	1-249-417-11		1K	5%	1/4W	
R58	1-249-417-11			5%	K, EE, CIS/N300K:EA)	R901	1-249-425-11	CARBON	4. 7K	5%	1/4₩	F
поо	1-249-417-11	CARDON	1K	3 <i>7</i> 6	1/4W F	R902	1-249-425-11	CAPRON	4. 7K	E9/	1/4₩	E.
R59	1-249-417-11	CARBON	1K	5%	1/4W F	R903	1-249-425-11		4. 7K		1/4W	
ÆR60	1-249-405-11		100	5%	1/4W F	R904	1-249-417-11		1K	5%	1/4W	
R61	1-249-423-11		3. 3K		1/4W F	R905	1-249-437-11		47K	5%	1/4W	•
R62	1-249-425-11		4.7K		1/4W F	R906	1-249-437-11		47K	5%	1/4W	
R63	1-249-425-11	CARBON	4.7K	5%	1/4W F							
						R907	1-249-437-11		47K	, 5%	1/4W	
R64	1-249-425-11		4. 7K		1/4W F	R908	1-249-437-11		47K	5%	1/4W	
R65	1-247-807-31		100	5%	1/4W	R914	1-247-863-91		22K	5%	1/4W	
R66	1-249-425-11		4. 7K		1/4W F	R915	1-247-863-91		22K	5%	1/4W	
R71	1-249-423-11	CARBON	3. 3K		1/4W F	R916	1-249-411-11	CARBON	330	5%	1/4₩	
R72	1-247-863-91	CADDON	22K	5%	1/4W EE, CIS)	R917	1-249-427-11	CADDOM	c ov	ΕØ	1 / AW	E
K (Z	1-241-003-91	CARDON	22N		00: AEP, UK, EE, CIS)	1	1-249-429-11		6. 8K 10K	5% 5%	1/4W 1/4W	r
				(110	00. ALI, OK, EL, CIO/	R920	1-249-429-11		10K	5%	1/4W	
R73	1-249-425-11	CARBON	4. 7K	5%	1/4W F	R921	1-249-417-11		1K	5%	1/4W	F
•					00:AEP, UK, EE, CIS)	R922	1-249-417-11		1K	5%		F (N300)
R74	1-249-425-11	CARBON	4.7K		1/4W F		- · J-		-		-, • "	(/
					00:AEP, UK, EE, CIS)	R923	1-249-417-11	CARBON	lK	5%	1/4W	F (N300)
R75	1-249-425-11	CARBON	4. 7K		1/4W F	R924	1-249-381-11	CARBON	1	5%	1/4W	
	1 040 400 55	CIPPON	100		00: AEP, UK, EE, CIS)						(N300: AE	P, UK, G, IT)
R701	1-249-430-11	CARBON	12K	5%	1/4W	1						

The components identified by mark \triangle or dotted line with mark \triangle are critical for safety.
Replace only with part number specified.

MAIN

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description				R	emark
R925	1-249-381-11	CARBON	1	5%	1/4W 1	F	R1195	1-247-863-91	CARBON	22K	5%	1/4W		
R926	1-249-381-11	CAPRON	1	5%	(N300: AEP,			1-247-811-31	CARBON	150	5%	1/4W	D (1)	000)
K320	1 243 301 11	CARDON	1	JA	(N300: AEP,			1-249-389-11 1-249-389-11		4.7	5% 5%	1/4W 1/4W	•	
R1001	1-249-417-11	CARBON	1K	5%	1/4W I	F (N300)		1-249-409-11		220	5%	1/4W		000)
	1-249-417-11		1K	5%	1/4W E	?	R1223	1-249-409-11	CARBON	220	5%	1/4W	F	
	1-249-437-11		47K	5%	1/4W	2 (NOOO)	_	1-216-454-11		390	5%	2₩	F	
	1-249-416-11 1-249-419-11		820 1.5K	5% 5%		(N300)		1-249-425-11		4. 7K		1/4W	-	
	1-245-415-11		560K		1/4W I	F (N300K)		1-249-425-11 1-249-435-11		4. 7K 33K	5% 5%	1/4W 1/4W	F	
	1-249-437-11		47K	EW	1 / 497									
	1-249-437-11		2. 7K	5% 5%	1/4W 1/4W F	7		1-249-441-11 1-249-429-11			5% 5%	1/4₩		
	1-249-427-11		6. 8K	5%	1/4W F			1-249-429-11		10K 56K	5% · 5%	1/4W 1/4W		
	1-249-409-11		220	5%		(N300)		1-247-791-91		22	5%	1/4W		
R1011	1-249-429-11	CARBON	10K	5%	1/4₩	()		1-249-421-11		2. 2K		1/4W	F	
R1012	1-249-429-11	CARRON	10K	5%	1/4W		D1248	1-249-389-11	CAPPON	4.7	Γ¢	1 / 437	E (N	200)
	1-249-429-11		10K	5%	1/4W			1-249-389-11		4. 7 4. 7	5% 5%	1/4W 1/4W	F (N3	
	1-249-429-11		10K	5%	1/4W			1-249-389-11		4. 7	5%		F (Na	
R1021	1-249-422-11	CARBON	2.7K	5%	1/4W F	7		1-249-389-11		4. 7	5%		F (N3	
R1022	1-249-427-11	CARBON	6. 8K	5%	1/4W F	,	R1272	1-249-409-11	CARBON	220	5%	1/4W		,,,,
R1044	1-249-415-11	CARBON	680	5%	1/4W F	,	R1273	1-249-409-11	CARBON	220	5%	1/4₩	F	
R1048	1-249-421-11	CARBON	2. 2K	5%	1/4W F	,		1-249-437-11		47K	5%	1/4W	•	
	1-249-441-11			5%	1/4W		R1296	1-249-421-11	CARBON	2. 2K	5%	1/4W	F	
	1-249-417-11		1K	5%	1/4W F	· · ·	R1298	1-249-389-11	CARBON	4.7	5%	1/4W	F (N3	300)
R1052	1-249-417-11	CARBON	1K	5%	1/4W F	' I	R1299	1-249-389-11	CARBON	4. 7	5%	1/4W	F (N3	300)
	1-249-437-11		47K	5%	1/4W		R1303	1-249-425-11	CARBON	4. 7K	5%	1/4W	F	
	1-249-416-11		820	5%	1/4W F	(N300)		1-249-425-11			5%	1/4W		
	1-249-419-11		1.5K			(N300K)		1-249-421-11		2. 2K	5%	1/4W	F	
	1-247-897-11			5%	1/4W			1-249-393-11		10	5%	1/4W	F	
K1056	1-249-437-11	CARBON	47K _	5%	1/4W		R1321	1-249-421-11	CARBON	2. 2K	5%	1/4W	F	
	1-249-422-11		2.7K	5%	1/4W F	1	R1322	1-247-791-91	CARBON	22	5%	1/4W		
	1-249-427-11			5%	1/4W F			1-247-791-91		22		1/4₩		
	1-249-409-11		220	5%	1/4W F			1-249-417-11		1K		1/4W	F	
	1-249-422-11 1-249-427-11			5%	1/4W F			1-249-429-11				1/4W		
			6. 8K	5%	1/4W F		K1361	1-249-421-11	CARBON	2. 2K	5%	1/4W	F	
	1-249-415-11			5%	1/4W F			1-249-421-11		2. 2K	5%	1/4W	F	
	1-249-421-11		2. 2K		1/4W F	ľ		1-247-863-91				1/4₩		
	1-249-441-11		100K		1/4W	1		1-247-863-91				1/4W		
	1-249-439-11 1-249-441-11		68K 100K	5% ·	1/4W 1/4W			1-247-863-91				1/4W		
KIIJI	1-245-441-11	CARDON	100K	3/6	1/41		к1511	1-249-429-11	CARBON	10K	5%	1/4W		
	1-249-425-11		4. 7K		1/4W F			1-247-863-91		22K	5%	1/4W		
	1-249-437-11			5%	1/4W			1-247-863-91					(N300K)
	1-247-863-91 1-249-429-11			5%	1/4W			1-249-421-11		2. 2K		1/4₩		
	1-249-429-11			5% 5%	1/4W 1/4W	- 1		1-249-425-11		4. 7K		1/4W	F	
			oon.	J/II	1/ 17			1-247-863-91		22K	5%	1/4W		
	1-247-811-31			5%	1/4W			1-249-429-11		10K	5%	1/4W		
	1-249-439-11			5%	1/4W	İ		1-249-429-11				1/4W		
	1-249-441-11			5%	1/4W			1-249-429-11 (1/4W		
	1-249-425-11 (1-249-429-11 (5% 5%	1/4W F			1-249-429-11 (1/4W	/	
N1194	1-443-463-11	CARDON	IOV	5%	1/4W		K15Z8	1-247-863-91 (CAKBON	22K	5%	1/4W ((N300K))

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.

Replace only with part number specified.

MAIN MD

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description			Remark
	1-249-431-11 1-249-423-11		15K 3. 3K	5% 5%	1/4W 1/4W	(N300)	RB1	1-239-260-11	ENCAPSULATED COMP	PONENT 1300:G, IT/	Manor.	E MV CD/
	1-249-425-11		4. 7K		1/4W	(N300:EE)	RB1	1-239-876-11	ENCAPSULATED COMP	ONENT		, EE, CIS)
	1-249-429-11		10K	5%	1/4W	(N300:CIS)	RB2	1-236-463-11	ENCAPSULATED COMP	PONENT		, EE, CIS)
			(N300	: AEP, U	K, G, 11	/N300K:EA)					nei, un	, EC, C13)
R1529	1-249-431-11	CARBON	15K	5%	1/4W (N300	K:E, MY, SP)	DV1	1 220 CO1 11	< VARIABLE RESIST			
R1530	1-247-863-91	CARBON	22K	5%	1/4W (N3	00:AEP, UK)	RV1 RV2 RV701	1-238-601-11	RES, ADJ, CARBON RES, ADJ, CARBON RES, ADJ, CARBON	22K		
R1530	1-249-423-11	CARBON	3. 3K	5%		F (N300K)			RES, ADJ, CARBON			
	1-249-429-11		10K	5%		N300:G, IT)			,,			
	1-249-431-11		15K	5%		(N300:EE)			< RELAY >			
	1-249-435-11		33K	5%		(N300:CIS)			· ILDDIII /			
111000	1 240 100 11	O'ALDOI!		0.4	-, -,,	(RY1201	1-515-920-11	RELAY (24V)			
R1531	1-249-429-11	CARBON	10K	5%	1/4W				(=1,7			
	1-249-429-11		10K	5%	1/4W				< TRANSFORMER >			
	1-249-429-11		10K	5%	1/4W		1					
	1-249-429-11		10K	5%	1/4W		T1	1-402-424-11	COIL (ANT, SW3) (N	300K • EA)		
	1-249-429-11		10K	5%	1/4W		T2		COIL (OSC SW3) (N			
D1544	1-249-429-11	CAPRON	10K	5%	1/4W				< TERMINAL >			
	1-247-807-31		100	5%	1/4W				/ IDMINAL /			
	1-247-807-31		100	5%	1/4W		TM1	1_537_939_91	TERMINAL BOARD (N	SUUK)		
	1-247-807-31		100	5%	1/4W		TM1		TERMINAL BOARD (A		2007	
									•	, ,	-	
	1-247-807-31		100	5%	1/4₩		TM1201	1-537-801-11	TERMINAL BOARD (S TERMINAL BOARD (S	PEAKERS) (I	N300)	
	1-247-807-31		100	5%	1/4₩		TM1202	1-537-240-31	TERMINAL BOARD (S	urround si	PEAKER:	S)
	1-247-807-31		100	5%	1/4W							
	1-247-807-31		100	5%		(N300K)			< VIBRATOR >			
	1-247-807-31		100	5%		(N300K)						
R1563	1-247-807-31	CARBON	100	5%	1/4W	(N300K)			VIBRATOR, CERAMIC VIBRATOR, CRYSTAL		Hz)	
R1564	1-247-807-31	CARBON	100	5%	1/4W	(N300K)	XT51	1-760-549-11	VIBRATOR, CRYSTAL	(4.5MHz)		
R1571	1-249-429-11	CARBON	10K	5%	1/4₩							
R1575	1-249-437-11	CARBON	47K	5%	1/4₩		*******	*******	************	*******	*****	******
R1701	1-247-807-31	CARBON	100	5%	1/4W							
R1702	1-247-807-31	CARBON	100	5%	1/4W			A-2007-131-A	MD BOARD, COMPLET	E		
			A 717	E 9 ⁄	1/4₩	p			************	*		
	1-249-425-11		4. 7K			Ľ			/ CADACTTOD \			
	1-247-807-31		100						< CAPACITOR >			
	1-247-807-31		100	5%	1/4W	P.	6001	1 100 000 11	CDDANIC	0000	. 00/	E 0.17
	1-249-417-11		1K	5%	1/4W	r		1-162-289-31			10%	50V
R1708	1-247-807-31	CARBON	100	5%	1/4W			1-124-443-00	-		20%	10V
D1010	1 040 400 ***	CADDON	100	E#	1 /4-			1-162-282-31			10%	50V
	1-249-429-11		10K	5%	1/4W			1-130-483-00			5%	50V
	1-249-437-11		47K		1/4W		C305	1-124-282-00	ELECT 2:	2uF 2	20%	16V
	1-249-437-11			5%	1/4W							
	1-249-421-11		2. 2K		1/4W	F		1-162-289-31			10%	50V
R1804	1-247-895-00	CARBON	470K	5%	1/4W			1-162-282-31			10%	50V
								1-130-487-00	MYLAR 0.	. 022uF 5	5%	50V
R1805	1-249-416-11	CARBON	820		1/4W	F		1-124-234-00	ELECT 2:	2uF 2	20%	16V
R1806	1-247-895-00	CARBON	470K	5%	1/ 4 ₩		C331	1-136-434-11	FILM 12	20PF 5	5%	630V
		< COMPOSITION	N CIRCL	JIT BLO	OCK >		C332	1-162-288-31	CERAMIC 33	30PF 1	10%	50V
								1-162-209-31			5%	50V
RB1	1-236-777-11	ENCAPSULATED	COMPON	IENT (1	N300K :	EA)		1-162-289-31			10%	50V
1	3 200 111 11					/		1-124-443-00			20%	10V
						'	0.100	- 10. 110 00		ovu. 2		201

MD MIC

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Descript	ion			Remark
C403	1-162-282-31	CERAMIC	100PF	10%	50V	R311 R312	1-247-881-00 1-247-807-31		120K 100	5% 5%	1/4W 1/4W	
C404	1-130-483-00	MYI AR	0. 01uF	5%	50V	R314	1-247-882-11		130K		1/4W	
	1-124-282-00		22uF	20%	16V	R315	1-247-850-11					
	1-162-289-31		390PF						6. 2K		1/4W	
C411				10%	50V	R331	1-249-430-11	CARBON	12K	5%	1/4₩	
C413	1-162-282-31		100PF	10%	50V	D.(01	1 047 001 00	CAPPON	1.0017			
C414	1-130-487-00	MYLAK	0. 022uF	5%	50V	R401	1-247-881-00		120K		1/4₩	
						R402	1-249-409-11		220	5%	1/4W	F
C415	1-124-234-00		22uF	20%	16V	R403	1-249-433-11		22K	5%	1/4W	
C431	1-136-434-11		120PF	5%	630V	R404	1-247-889-00		270K	5%	1/4W	
	1-162-288-31		330PF	10%	50V	R405	1-247-858-11	CARBON	13K	5%	1/4W	
C433	1-162-209-31		27PF	5%	50V							
C601	1-126-157-11	ELECT	10uF	20%	16V	R411	1-247-881-00	CARBON	120K	5%	1/4W	
						R412	1-247-807-31	CARBON	100	5%	1/4W	
C602	1-126-157-11	ELECT	10uF	20%	16V	R414	1-247-882-11	CARBON	130K	5%	1/4W	
C611	1-126-157-11	ELECT	10uF	20%	16V	R415	1-247-850-11	CARBON	6. 2K	5%	1/4W	
C612	1-126-157-11	ELECT	10uF	20%	16V	R431	1-249-430-11	CARBON	12K	5%	1/4W	
C621	1-136-601-11		0. 01uF	5%	630V						-,	
C622	1-124-925-11		2. 2uF	20%	100V	R601	1-249-409-11	CARRON	220	5%	1/4W	F
0022	1 121 020 11			00,0		R602	1-249-409-11			: 5%	1/4W	
C623	1-136-155-00	FIIM	0. 015uF	5%	50V	R608	1-249-409-11		220	5%	1/4W	
C624	1-130-481-00		0. 0068uF	5%	50V	R609	1-249-433-11		22K	5%		Г
C625	1-130-481-00		0. 0068uF	5%	50V	R611					1/4W	-
						K011	1-249-409-11	CARDON	220	5%	1/4W	r
C627	1-124-903-11		luF	20%	50V	DC10	1 040 400 11	CARROW	000	=0/		_
C628	1-136-153-00	FILM	0. 01uF	5%	50V	R612	1-249-409-11		220	5%	1/4W	
00.40		D. D.O.		000	0=11	<u></u> A R621	1-212-851-00		5. 6	5%	1/4W	
	1-124-477-11		47uF	20%	25V	<u></u> 1 R622	1-212-851-00		5. 6	5%	1/4W	F
C651	1-164-159-11	CERAMIC	0. 1uF		50V	R623	1-249-432-11		18K	5%	1/4W	
						R624	1-249-432-11	CARBON	18K	5%	1/4W	
		< CONNECTOR >										
						R625	1-249-429-11		10K	5%	1/4W	
		SOCKET, CONNECTO				R651	1-247-856-00	CARBON	11K	5%	1/4W	
		PIN, CONNECTOR (E) 2P		R652	1-247-856-00	CARBON	11K	5%	1/4W	
* CN651	1-564-521-11	PLUG, CONNECTOR	6P			R653	1-249-441-11	CARBON	100K	5%	1/4₩	
		< IC >						< VARIABL	E RESISTOR >			
IC601	8-759-111-44	IC uPC4570C-1				RV301	1-238-598-11	RES, ADJ.	CARBON 2, 2K			
IC602	8-759-143-54	IC uPC1330HA					1-238-598-11					
	8-759-111-44						1-238-551-11					
							1-238-598-11					
		< COIL >					1-238-598-11					
							100	not not	Simbon a. all			
L331	1-410-780-11	INDUCTOR	27mH			RV441	1-238-551-11	DES ADI	CARRON 220K			
L431	1-410-780-11		27mH				1-238-599-11					
1,401	1 410 700 11	INDUCTOR	2 t mit				1-238-599-11					
		< TRANSISTOR >				RVOSZ	1-230-333-11	REO, NUJ,	CARDON 4. IN			
		\ TRANSISION >						< TRANSFO	DMCD /			
0621	8-729-142-46	TRANSISTOR 200	2001_1 K					\ IRANSPU	rmer /			
Q621			2001-LK			TC01	1 400 000 11	TDANCEODA	ED DIAC OCC	T T T A 7	N. ON	
Q622	8-729-142-46		2001-LK			T621	1-423-980-11	IKANSPURM	ER, BIAS OSC	ILLA.	TON	
Q623	8-729-801-93		1387									
Q651	8-729-900-65	TRANSISTOR DIA	144ES			******	**********	********	*********	****	******	*****
		/ DECIGEOR :					1 054 000 00	MIA BALL	(110000**)			
		< RESISTOR >				*	1-654-620-11					
<u></u>								******	******			
R301	1-247-881-00		120K 5%	1/4W								
R302	1-249-409-11		220 5%	1/4₩	F			< CAPACIT	OR >			
R303	1-249-433-11	CARBON	22K 5%	1/4W								
R304	1-247-889-00	CARBON	270K 5%	1/4W	I	C1637	1-124-925-11	ELECT	2. 2uF	20%	100V	
R305	1-247-858-11	CARBON	13K 5%	1/4W		C1638	1-162-294-31	CERAMIC	0.001uF	10%	50V	
								г				
									The compone	nts ide	entified by	/ mark

The components identified by mark \triangle or dotted line with mark \triangle are critical for safety.

Replace only with part number specified.

MIC OPEN/CLOSE PANEL

Ref. No. Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
C1639 1-162-215-31 C1640 1-162-294-31	CERAMIC 0.001ul	5% F 10% 20%	50V 50V 10V		*	A-4377-127-A	PANEL BOARD, COM	•	,	
C1646 1-126-803-11 C1647 1-126-803-11	ELECT 47uF	20%	10V		*	A-4377-144-A	PANEL BOARD, COM			
C1650 1-124-925-11 C1651 1-162-294-31 C1652 1-162-215-31	CERAMIC 0.001ul CERAMIC 47PF	5%	100V 50V 50V		*	A-4377-603-A	PANEL BOARD, COM			,
C1653 1-162-294-31	CERAMIC 0.001ul	F 10%	50V		*	4-949-935-21 4-969-681-01	CUSHION (FL) HOLDER, FL TUBE			
	Composition									
* CN1601 1-568-954-11	PIN, CONNECTOR 5P	-					< CAPACITOR >			
	< IC >				C500	1-162-306-11		0. 01uF	20%	16V
IC1603 8-759-634-51	TC MESTINAD				C501 C502	1-162-306-11 1-126-157-11		0. 01uF 10uF	20% 20%	16V 16V
101003 0-139-034-31	1C M3210AF				C502	1-124-257-00		2. 2uF	20%	50V
	< JACK >				C504	1-162-303-11		0.0033uF	20%	16V
J1601 1-569-113-11	TACK TADOR TYPE	(NIC 1)			C505	1-162-303-11	CEDAMIC	0. 0033uF	20%	16V
J1602 1-573-151-11						1-102-303-11		10uF	20%	16V
J1002 1 313 131 11	JACK, DAKOD III D	(MIC 2)			C507	1-124-257-00		2. 2uF	20%	50V
	< TRANSISTOR >				C508	1-162-294-31		0.001uF	10%	50V
					C509	1-162-294-31		0.001uF	10%	50 V
R1638 1-249-429-11	CARBON 10K	5%	1/4W							
R1639 1-249-417-11			1/4W F		C510	1-162-306-11		0.01uF	20%	16V
R1640 1-249-441-11			1/4W		C511	1-124-257-00		2. 2uF	20%	50 V
R1641 1-249-417-11			1/4W F			1-162-290-31		470PF	10%	50V
R1642 1-247-863-91	CARBON 22K	5%	1/4W			1-162-290-31		470PF	10%	50V
D1050 1 010 100 11	CADDON 101	F&	1 / 410		C514	1-162-306-11	CERAMIC	0. 01uF	20%	16V
R1650 1-249-429-11		5% 5%	1/4W 1/4W F		C515	1-124-257-00	EI ECT	2. 2uF	20%	50V
R1651 1-249-417-11 R1652 1-249-441-11			1/4W F		C601	1-124-257-00		2. zur 47uF	20%	16V
R1653 1-249-417-11	******		1/4W F		C602	1-162-282-31		100PF	10%	50V
R1654 1-247-863-91		5%	1/4W		C604	1-162-306-11		0. 01uF	20%	16V
	•		-,		C605	1-162-306-11	CERAMIC	0. 01uF	20%	16V
R1655 1-249-429-11	CARBON 10K	5%	1/4W	. =						
R1657 1-249-429-11	CARBON 10K	5%	1/4W		C606	1-126-177-11		100uF	20%	10V
					C607	1-162-306-11		0. 01uF	20%	16V
***********	********	******	******	******	C609	1-126-157-11		10uF	20%	16V
1 054 649 11	OPEN/CLOSE BOARD				C661 C662	1-162-284-31		150PF	10%	50V
* 1-654-648-11	************				C002	1-162-284-31	CERAMIC	150PF	10%	50V
					C663	1-162-284-31	CERAMIC	150PF	10%	50V
	< JACK >					1-162-284-31		150PF	10%	50V
					C665	1-162-284-31	CERAMIC	150PF	10%	50V
J1201 1-569-113-11	JACK, LARGE TYPE	(HEADPHO	NES)			1-162-284-31		150PF	10%	50V
					C671	1-164-159-11	CERAMIC	0. 1uF		50V
	< SWITCH >				C672	1-164-159-11	CEDAMIC	0.105		50V
S637 1-554-303-21	SWITCH, TACTILE (4	△ OPEN/	(CLOSE)			1-104-159-11		0. 1uF 10uF	20%	50V 50V
200. 2 001 000 21			,							
*******	******	******	******	******			< CONNECTOR >			
					* CN601	1-568-834-11	SOCKET, CONNECTO	OR 15P		
							< DIODE >			
					D503	8-719-987-63	DIODE 1N4148M			

PANEL

Ref. No.	Part No.	Descripti	on	Remark	Ref. No.	Part No.	Description					Remark
D507 D511	8-719-987-63 8-719-987-63		N4148M N4148M		Q616	8-729-119-76	TRANSISTOR	2SA11	75-HFE			
D515	8-719-987-63		N4148M				< RESISTOR >					
D530	8-719-987-63		N4148M				· ILDIDION /					
					R500	1-249-435-11		33K	5%	1/4W		
D531	8-719-987-63		N4148M		R501	1-249-441-11		100K		1/4W		
D532	8-719-987-63		N4148M		R502	1-247-895-00		470K		1/4W		
D533	8-719-987-63 8-719-987-63		N4148M		R504	1-249-435-11		33K	5%	1/4W		
D600 D617	8-719-987-63		N4148M EL5221S-TH8F		R505	1-249-441-11	CARBON	100K	5%	1/4W		
2011	0 713 040 40	DIODE 3	ED2612_HIOL		R506	1-247-895-00	CARRON	470K	E@/	1/4W		
D618	8-719-046-46	DIODE S	EL5221S-TH8F		R508	1-249-435-11		33K	5%	1/4W		
D619	8-719-046-46		EL5221S-TH8F		R509	1-249-441-11		100K		1/4W		
D620	8-719-046-46		EL5221S-TH8F		R510	1-247-895-00		470K		1/4W		
D621	8-719-046-46	DIODE S	EL5221S-TH8F		R512	1-249-435-11		33K	5%	1/4W		
D622	8-719-046-46	DIODE S	EL5221S-TH8F							-,		
D000	0 510 010 05				R513	1-249-441-11		100K		1/4W		
D623	8-719-046-35		EL5921A-TH8F		R514	1-247-895-00		470K		1/4W		
D624	8-719-046-42		EL5421E-TH8F		R516	1-249-437-11		47K		1/4W		
D625 D626	8-719-046-42 8-719-046-42		EL5421E-TH8F EL5421E-TH8F (N300)		R517	1-249-437-11		47K	5%	1/4W		
D626	8-719-040-42		EL58420C-TP (N300K)		R518	1-249-437-11	CARBON	47K	5%	1/4W		
5020	0 110 002 22	DIODE 5.	DESCRIPTION (NOUN)		R519	1-249-437-11	CARRON	47K	59	1 / 4 W		
D627	8-719-046-42	DIODE S	EL5421E-TH8F (N300)		R553	1-249-408-11		180		1/4W 1/4W	E	
D627	8-719-052-22		EL58420C-TP (N300K)		R556	1-249-437-11		47K		1/4W		(N300K)
D628	8-719-046-46		EL5221S-TH8F (N300K)		R609	1-249-429-11		10K		1/4W		(14000K)
D629	8-719-010-12		Z-2. 7BS		R610	1-249-429-11		10K		1/4W		
D630	8-719-010-12	DIODE U	Z-2. 7BS							-,		
2004				i	R611	1-249-419-11		1.5K	5%	1/4₩	F	
D634	8-719-024-99		1ES2-NTA2B (N300K:MY)	. 1	R612	1-247-811-31		150		1/4W		
D634 D651	8-719-200-82		1ES2 (N300/N300K:E, EA, SP)) [R613	1-249-410-11		270		1/4W		
D651 D652	8-719-987-63 8-719-046-46		N4148M EL5221S-TH8F	1	R614 R615	1-249-408-11		180		1/4W		
5005	0 110 040 40	DIODE SI	DE08813 11101		K013	1-249-409-11	CARDON	220	5%	1/4W	F	
		< FLUORESO	CENT INDICATOR >		R616	1-249-411-11	CARBON	330	5%	1/4W		
				ŀ	R617	1-249-413-11		470		1/4W	F	
FL601	1-517-341-11	INDICATOR	TUBE, FLUORESCENT		R618	1-249-414-11	CARBON	560		1/4W		
					R619	1-249-416-11		820		1/4₩		
		< IC >			R620	1-249-418-11	CARBON	1. 2K	5%	1/4₩	F	
10501	8-759-634-51	IC M5218	PAD		D621	1 240 490 11	CADDON	1 01/	58/	1 (/ 177	_	
	8-759-634-51				R621 R622	1-249-420-11 1-249-423-11		1. 8K 3. 3K		1/4W		
	8-749-922-36					1-249-427-11		6. 8K		1/4W		
	8-752-862-43		2612-006Q			1-249-419-11		1. 5K		1/4₩ 1/4₩		
IC608	8-752-866-01	IC CXP82	2612-009Q		R625	1-247-811-31				1/4W	•	
				- [
		< COIL >				1-249-410-11				1/4W		
1 001	1 410 500 11	TAIDUICTOD	10			1-249-408-11				1/4W		
L601	1-410-509-11	INDUCTOR	10uH			1-249-409-11				1/4W	F	
		< TRANSIST	'AP \			1-249-411-11				1/4W	_	
		/ INMO101	ON >		KOSU	1-249-413-11	CARBUN	470	5%	1/4₩	F	
Q601	8-729-422-57	TRANSISTOR	UN4111		R631	1-249-414-11	CARBON	560	5%	1/4₩	F	
Q602	8-729-422-57					1-249-416-11				1/4W		
Q608	8-729-900-63		DTA124ES	-		1-249-418-11		l. 2K		1/4W		
Q609	8-729-119-78			- 1		1-249-420-11		l. 8K		1/4W		
Q610	8-729-900-63	TRANSISTOR	DTA124ES (N300K)		R635	1-249-423-11	CARBON :	3. 3K		1/4₩		
0611	9 720 110 70	TDANCICTOR	904117F HPP (11000M)		Door	1 040 400	0.000					
Q611 Q612	8-729-119-76 8-729-900-80					1-249-427-11 (5. 8K		1/4W		
WO17	0 125 500-00	TIVIO 1910IL	DTC114ES (N300K)	- 1	R637	1-249-419-11 (JAKBUN	. 5K	5%	1/4W	r'	

PANEL

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Descrip	tion	Remark
R650	1-249-419-11	CARBON	1. 5K	5%	1/4W	F			< SWITC	H >	
R651	1-247-811-31		150	5%	1/4W	-			. 0,110	,	
R652	1-249-410-11		270	5%	1/4W	F	S603	1-554-303-21	SWITCH.	TACTILE	(\(\)
							S604	1-554-303-21			
R653	1-249-408-11	CARBON	180	5%	1/4W	F	S605	1-554-303-21			
R654	1-249-409-11		220	5%	1/4W		S606	1-554-303-21			
R655	1-249-411-11		330	5%	1/4W	_	S607	1-554-303-21			
R656	1-249-413-11		470	5%	1/4W	F			D,	***************************************	(201022011)
R657	1-249-414-11		560	5%	1/4W		S608	1-554-303-21	SWITCH.	TACTILE	(DD)
							S609	1-554-303-21			
R658	1-249-416-11	CARBON	820	5%	1/4W	F	S610	1-554-303-21	-		
R659	1-249-418-11		1. 2K		1/4W		S611	1-554-303-21			
R660	1-249-420-11		1.8K	5%		F (N300K)	S612	1-554-303-21			
R661	1-249-423-11		3. 3K			F (N300K)					
R662	1-249-427-11		6.8K			F (N300K)	S613	1-554-303-21	SWITCH.	TACTILE	(D)
						,	S614				(HIGH SPEED DUBBING)
R663	1-247-903-00	CARBON	1M	5%	1/4W		S615	1-554-303-21			
R664	1-249-415-11		680	5%	1/4W	F	S616	1-554-303-21			
R665	1-249-415-11	CARBON	680	5%	1/4W	F	S617	1-554-303-21			
R666	1-249-415-11	CARBON	680	5%	1/4W						
R667	1-249-415-11	CARBON	680	5%	1/4W		S618	1-554-303-21	SWITCH.	TACTILE	(TUNER/BAND)
							S619	1-554-303-21			
R668	1-249-415-11	CARBON	680	5%	1/4W	F	S620	1-554-303-21			•
R669	1-249-415-11	CARBON	680	5%	1/4W	F	S621				(TUNING MODE)
R682	1-249-408-11	CARBON	180	5%	1/4W	F	S622				(TUNING MEMORY)
R683	1-249-412-11	CARBON	390	5%	1/4₩	F					
R684	1-249-410-11	CARBON	270	5%	1/4W		S623	1-554-303-21	SWITCH,	TACTILE	(DISPLAY)
							S624	1-554-303-21			
R685	1-249-410-11	CARBON	270	5%	1/4W	F	S625	1-554-303-21			
R686	1-249-410-11	CARBON	270	5%	1/4W	F	S626	1-554-303-21			
R687	1-249-429-11	CARBON	10K	5%	1/4₩	(N300K)	S627	1-554-303-21			
R688	1-249-410-11	CARBON	270	5%	1/4W	F					
R689	1-249-410-11	CARBON	270	5%	1/4W	F (N300K)	S628	1-554-303-21	SWITCH,	TACTILE	(TIMER SET)
							S642	1-554-303-21	SWITCH,	TACTILE	(SYSTEM POWER)
R690	1-249-410-11	CARBON	270	5%	1/4W			1-554-303-21	SWITCH,	TACTILE	(SLEEP)
R691	1-249-410-11		270	5%		F (N300K)	S644	1-554-303-21			
R692	1-249-413-11		470	5%		F (N300K)	S645	1-554-303-21	SWITCH,	TACTILE	(POPS/2)
R693	1-249-429-11		10K	5%	1/4₩	_					
R695	1-249-421-11	CARBON	2. 2K	5%	1/4W	F	S646	1-554-303-21			
							S647	1-554-303-21			
R696	1-247-807-31			5%	1/4₩		S648	1-554-303-21			
R697	1-247-807-31		100	5%	1/4W		S649	1-554-303-21			
R703	1-249-429-11		10K	5%	1/4W		S650	1-554-303-21	SWITCH,	TACTILE	(P. FILE)
R704	1-249-429-11		10K	5%	1/4W						4.5
R710	1-249-429-11	CARBON	10K	5%	1/4W		S651	1-554-303-21			
	1 0 10 100 11	CARRON	1.01*	CA/			S652				(# UP) (N300K)
R711	1-249-429-11		10K	5%	1/4W	(11000)	S653				(b DOWN) (N300K)
R712	1-249-429-11		10K	5%	1/4W		S654	1-554-303-21	SWITCH,	TACTILE	(KARAOKE PON/MIX) (N300K)
R713	1-249-429-11		10K	5%	1/4W	(N300)					
R773	1-249-429-11		10K	5%	1/4W				< VIBRAT	OR >	
R774	1-249-429-11	CARBON	10K	5%	1/4W		2001	1 505 010 11	*** Np + m = -	Ammini	0 (1111)
D770	1-249-429-11	CADDON	101/	CW	1 / 490		X601	1-567-819-11	VIBRATOR	CERAMI	C (4MHz)
R778 R779	1-249-429-11		10K 10K	5% 5%	1/4W 1/4W		*****	*****			*******
N/17	1 440 440 11	CHINDON	1011	J/II	1/11		*****	*************	********	*****	*******
		< VARIABLE RI	ESISTO	R >							
RV601	1-467-869-11	ENCODER, ROTA	ARY (VO	OLUME)							

POLAR POWER

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description				Remark
*	A-4377-602-A	A POLAR BOARD, CO	-			Q1704	8-729-900-80	TRANSISTOR	DTC114ES	8		
		< CAPACITOR >						< RESISTOR	>			
		CAPACITOR >				R1701	1-247-863-91	CARBON	22K	5%	1/4W	
C1701	1-162-294-31	CERAMIC	0. 001uF	10%	50V		1-249-435-11		33K	5%	1/4W	
	1-130-014-00		470PF	5%	50V		1-249-427-11		6.8K		1/4W	F
	1-124-902-00		0. 47uF	20%	50V		1-247-858-11		13K	5%	1/4W	
	1-124-902-00		0. 47uF	20%	50V	R1705	1-249-417-11	CARBON	1K	5%	1/4₩	F
C1705	1-164-098-11	CERAMIC	0. 047uF		12 V	DIZOC	1 040 417 11	CARROW				
C1706	1-124-903-11	DIECT	1uF	20%	50V		1-249-417-11 1-249-441-11		1K	5%	1/4W	F
	1-162-288-31		330PF	10%	50V		1-249-441-11		100K		1/4W	
	1-130-471-00		0. 001uF	5%	50V		1-249-440-11		82K 47K	5% 5%	1/4W	
	1-130-471-00		0. 001uF	5%	50V		1-249-429-11		10K	5% 5%	1/4W 1/4W	
	1-130-736-11		0. 01uF	5%	50V		1 010 100 11	CARDON	100	3/0	1/4#	
						R1711	1-249-429-11	CARBON	10K	5%	1/4W	
C1713	1-130-736-11	FILM	0. 01uF	5%	50V		1-249-426-11		5. 6K		1/4W	
	1-124-903-11		luF	20%	50V	R1715	1-249-426-11	CARBON	5. 6K		1/4W	
	1-124-903-11		luF	20%	50V		1-249-441-11		100K	5%	1/4W	
	1-124-903-11		luF	20%	50V	R1717	1-249-441-11	CARBON	100K	5%	1/4W	
C1719	1-124-477-11	ELECT	47uF	20%	25V							
C1700	1 100 000 11	CEDINIC	0.01.7	0.04/	1.077		1-249-429-11		10K	5%	1/4W	
	1-162-306-11		0. 01uF	30%	16V		1-249-429-11		10K	5%	1/4W	
	1-162-306-11 1-162-306-11		0. 01uF 0. 01uF	30% 30%	16V 16V		1-249-434-11		27K	5%	1/4₩	
	1-102-300-11		47uF	20%	25V	K1122	1-249-441-11	CARBON	100K	5%	1/4₩	
	1-124-903-11		luF	20%	50V			< VARIABLE F	DECICTOR \			
01120	1 124 500 11	LDBC1	101	2070	301			VARIABLE I	(ESISION >			
	1-124-903-11 1-104-792-51		1uF 33uF	20% 20%	50V 16V		1-238-600-11 1-238-599-11					
		< CONNECTOR >						< TEST PIN >	•			
CN1701	1-750-418-11	CONNECTOR, FFC/	FDC 13D			+ TD1701	1-560-061-00	DIN CONNECT	מת ממי			
CMITOI	1 100 410 11	COMMECTOR, FFC/	110 101				1-560-061-00					
		< TRIMMER >					1 000 001 00	TIN, COMMECT	OIC OI			
						******	******	*********	*******	****	******	*****
CT1701	1-141-260-00	CAP, TRIMMER	50PF									
		< DIODE >				*	1-654-654-11	POWER BOARD				
D1701	8-719-987-63	DIODE 1N4148M					1-533-217-31	HOLDER RUCE				
	8-719-987-63					*	1-560-595-00					
D1704	8-719-987-63	DIODE 1N4148M					- 000 000 00	I DIGITIVID (#1	III DIIOD)			
D1705	8-719-987-63	DIODE 1N4148M						< FUSE >				
		< IC >				<u></u> £F1901	1-532-350-00	FUSE, TIME L	AG (T4AL)			
					ĺ	 F1902	1-532-350-00	FUSE, TIME L	AG (T4AL)			
	8-759-063-04											
101703	8-759-140-53	IC uPD4053BC			ł			< RESISTOR >				
		< COIL >				A D1001	1_217_627 00	מ ומ נסום	1 = 5%	1 / 4 117	Б	
		· COIL /					1-217-637-00 1-219-121-81			1/4W		
L1701	1-409-497-11	COIL (FILTER)				_	1-219-121-81		0. 22 5% 0. 22 5%			
		< TRANSISTOR >				*******	*********	********	*******	****	******	*****
Q1701	8-729-422-57	TRANSISTOR UN4	111									
Q1702	8-729-900-80	TRANSISTOR DTC	114ES									

The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

POWER AMP POWER PRIMARY

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description					Remark
*	A-4377-137-A	POWER AMP BOARD, CO					< RESISTOR	>				
		*****************		300:AEP, UK, G, IT)		1-249-417-11		1K		1/4W	F	
		DOWND 1110 DOIDS 00	MDY PMF	(N800 PB (10)		1-249-437-11				1/4W		
*	A-4377-606-A	POWER AMP BOARD, CO			1	1-249-415-11 1-249-437-11		680 47K		1/4W 1/4W	r	
		****	*****	*******	1	1-249-425-11				1/4W	F	
*	A-4377-147-A	POWER AMP BOARD, CO	MPLETE	E(N300K)								
		***********	*****	******		1-249-425-11				1/4W		
						1-249-425-11 1-249-425-11				1/4W 1/4W		
						1-212-881-11		100		1/4W		
						1-208-602-11		0.22	10%	2W	F	
		< CAPACITOR >			D1011	1 0/0 /17 11	CARRONI	117	E0/	1 / 477	5	
C1901	1-124-927-11	ELECT 4. 7uF	20%	100V	1	1-249-417-11 1-249-431-11		1K 15K		1/4W 1/4W	F	
	1-162-288-31		10%	50V		1-249-441-11		100K				
	1-162-286-21		10%	50V		1-249-421-11				1/4W	F	
	1-126-803-11		20%	10V	R1215	1-249-421-11	CARBON	2. 2K	5%	1/4W	F	
C1205	1-124-910-11	ELECT 47uF	20%	50V								
C1 90 C	: 1 104 100 31	PLECT 100P	200/	50V		1-249-421-11				1/4₩		
	1-124-122-11 1-124-916-11		20% 20%	63V	l .	1-249-421-11 1-247-791-91		2. 2n 22		1/4W 1/4W	Г	
	1-137-375-11		5%	50V		1-247-791-91		22		1/4W		
	1-137-375-11		5%	50V		1-247-881-00		120K				
C1220	1-126-925-11	ELECT 470uF	20%	10V	D1000	1 010 100 11	CARRON		=6/	4 / 4 ***		
C1 25 1	1-124-927-11	ELECT 4.7uF	20%	100V		1-249-429-11 1-249-429-11		10K 10K		1/4W 1/4W		
	1-162-288-31		10%	50V		1-249-383-11				1/6W	F	
	1-162-286-21		10%	50V		1-249-417-11		1K		1/4W		
	1-126-803-11		20%	10V	R1252	1-249-437-11	CARBON	47K	5%	1/4W		
C1255	1-124-910-11	ELECT 47uF	20%	50V	חומרים	1 040 415 11	CADDON	con	ΓÓV	1 / 4100	Б	
C1256	1-124-122-11	ELECT 100uF	20%	50V		1-249-415-11 1-249-437-11		680 47K		1/4W	r	
	1-137-375-11		5%	50V		1-249-425-11				1/4W	F	
C1261	1-137-375-11	FILM 0.068uF	5%	50V		1-249-425-11		4.7K	5%	1/4W	F	
		(COMPROMOD)			R1257	1-249-425-11	CARBON	4. 7K	5%	1/4W	F	
		< CONNECTOR >			R1258	1-249-425-11	CARRON	4 7K	5%	1/4W	F	
* CN1203	3 1-564-518-11	PLUG, CONNECTOR 3P				1-212-881-11		100		1/4W		
CN120	4 1-564-511-11	PLUG, CONNECTOR 8P			<u></u> ₹ R1260	1-208-602-11	WIREWOUND	0. 22	10%	2W	F	
		, p. 10pp				1-249-417-11		1K		1/4W	F	
		< DIODE >			R1262	1-249-431-11	CARBON	15K	5%	1/4W		
D1201	8-719-987-63	DIODE 1N4148M			R1263	1-249-441-11	CARBON	100K	5%	1/4W		
D1202	8-719-987-63	DIODE 1N4148M			R1268	1-247-791-91	CARBON	22	5%	1/4W		
D1251	8-719-987-63	DIODE 1N4148M			R1269	1-247-791-91	CARBON	22	5%	1/4W		
		< IC >			******	******	******	*****	****	*****	*****	******
10100	1 8-749-900-96	S IC STK-4142MK2 (N	3007		*	1-654-694-11	DOWED DOING	DV DO	ממ			
		FIC STK-4142MK2K (N	/)	*	1-054-094-11	*********					
10120	1 0 110 000 00	(
		< TRANSISTOR >					< CONNECTOR	>				
•		TRANSISTOR 2SC184 TRANSISTOR 2SC184			* CN1951	1-580-230-31	PIN, CONNEC	TOR (P	C BO			K:EA, SP)
					*******	*********	*********	*****	****	*****	*****	*****
					1							

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.

Replace only with part number specified.

REGULATOR TC PANEL

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description	Remark
*	1-654-656-11	REGULATOR BOA			/		MISCELLANEOUS **************	
C1352	1-124-443-00 1-124-907-11	ELECT 10	00uF 20% 10V 0uF 20% 50V		⚠4 ⚠5 ⚠6 ⚠7	1-558-943-51 1-575-651-21 1-569-008-11	ADAPTER, CONVERSION 2P (N300K:EA,	MY, SP)
	1-124-907-11 1-124-443-00	ELECT 10	OuF 20% 50V OOuF 20% 10V		12	1-690-113-11	CORD, POWER (N300:UK) WIRE, FLAT TYPE (15 CORE) (N300K)	
IC1351	8-759-334-30	< IC > IC LA5618			12 57 58 59	1-769-304-11 1-751-590-11	WIRE (FLAT TYPE) (13 CORE) (N300:CI WIRE (FLAT TYPE) (19 CORE) WIRE (FLAT TYPE) (21 CORE) WIRE, FLAT TYPE (11 CORE)	(S)
******	******	*******	********	******	33	1-330-433-11	WIND, FLAT TIPE (II CORE)	
*	1-654-650-11	TC PANEL BOAR			63 129 <u>1</u> 351 352	1-575-906-31 8-848-387-01 1-769-069-11	HOLDER, FUSE WIRE, FLAT TYPE (15 CORE) OPTICAL PICK-UP BLOCK (KSS-213BA/WIRE (FLAT TYPE) (16 CORE)	(S-N)
		< DIODE >			♠ F1901	1-532-350-00	FUSE, TIME LAG (T4AL)	
D611 D612 D613 D613 D614	8-719-046-46 8-719-046-46 8-719-046-42 8-719-052-22 8-719-046-42	DIODE SEL52 DIODE SEL54 DIODE SEL58	21S-TH8F (DECK B) 21S-TH8F (DECK A) 21E-TH8F (TAPE) (N3 420C-TP (TAPE) (N3 21E-TH8F (TAPE) (N3	0K)	HP101	1-500-093-11 11-500-094-11 X-3369-110-1	FUSE, TIME LAG (T4AL) HEAD, MAGNETIC (PLAYBACK) HEAD, MAGNETIC (REC/PB/ERASE) MOTOR ASSY (CAPSTAN) MOTOR ASSY (TRIGGER)	
D614	8-719-052-22	DIODE SEL58	420C-TP (TAPE) (N30	OK)	M102 M151	X-4917-504-1 A-4604-363-A	MOTOR ASSY (SPINDLE) MOTOR ASSY (SLED) MOTOR (L) ASSY (LOADING)	
Q603 Q604 Q615	8-729-900-63 8-729-119-78 8-729-119-76	TRANSISTOR	DTA124ES 2SC2785-HFE (N300K 2SA1175-HFE)	⚠ S1911 ⚠ T901	1-427-706-11	SWITCH, VOLTAGE CHANGE (N300K:E, E TRANSFORMER, POWER (N300K:E, EA, SP TRANSFORMER, POWER (N300)	A, SP)
4								
		< RESISTOR >			*******	**********	************	*****
R638 R639 R640	1-247-811-31 1-249-410-11 1-249-408-11	CARBON	150 5% 1/4W 270 5% 1/4W 180 5% 1/4W				S & PACKING MATERIALS	
R641 R670 R671	1-249-409-11 1-249-409-11 1-249-409-11	CARBON	220 5% 1/4W 1 220 5% 1/4W 1 220 5% 1/4W 1	F		1-501-374-11 1-501-594-31	COMMANDER, STANDARD (RM-S300L) ANTENNA, LOOP (N300:AEP, G, IT, EE, C ANTENNA (FM) (N300:AEP, IT, EE, CIS)	IS)
R672 R673 R674	1-249-429-11 1-249-410-11 1-249-410-11	CARBON CARBON CARBON	10K 5% 1/4W 270 5% 1/4W 1 270 5% 1/4W 1	(N300K) F F (N300K)		3-798-238-41	MANUAL, INSTRUCTION (ENGLISH, POLISH, GERMAN) (N300: MANUAL, INSTRUCTION JISH, FRENCH, SPANISH, PORTUGUESE) (N3	,,
R675	1-249-410-11	CARBON 2	270 5% 1/4W 1	F		2_709_229_51	MANUAL, INSTRUCTION	
R676	1-249-410-11	CARBON 2 < SWITCH >	270 5% 1/4W I	F (N300K)			(GERMAN, DUTCH, ITALIAN) (N300: MANUAL, INSTRUCTION	, ,
	1-554-303-21 1-554-303-21	SWITCH, TACTII SWITCH, TACTII	LE (DECK SELECT)		*		(DANNISH, FINISH, SWEDISH) (N30 MANUAL, INSTRUCTION (GERMAN) (N300 COVER (MLY), BATTERY (for RM-S300 CUSHION	:G)
S632	1-554-303-21	SWITCH, TACTII	LE (TAPE REWIND ◀ LE (DOLBY NR) (N300) LE (DIRECTION MODE))	*		INDIVIDUAL CARTON (N300:AEP, G, IT) INDIVIDUAL CARTON (N300:EE, CIS)	
******	********	*********	*********	*******	******	********	*********************	*****

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.

Replace only with part number specified.

Ref. No.	Part No.	<u>Description</u> <u>Remark</u>

#1 #2 #3 #3	7-685-534-19 7-682-548-04	SCREW +BVTP 3X8 TYPE2 N-S SCREW +BTP 2.6X8 TYPE2 N-S SCREW +BVTT 3X8 (S) (N300:UK) SCREW +BVTT 3X6 (S) (N300:AEP, G, IT, EE, CIS/N300K)
#4	7-621-849-00	SCREW, TAPPING
#5 #6 #7 #8 #9	7-685-650-79 7-685-533-19 7-621-775-10	SCREW +BVTT 4X6 (S) SCREW +BVTP 3X16 TYPE2 IT-3 SCREW +BTP 2.6X6 TYPE2 N-S SCREW +B 2.6X4 SCREW +B 2.6X3
#10 #11 #12 #13	7-621-770-67 7-621-255-15	RING, RETAINING, CAPSTAN SCREW +BVTT 2.6X6 (S) SCREW +P 2X3 SCREW +BTP 2.6X4 TYPE2 N-S

SS-LB300

SERVICE MANUAL



E Model Australian Model PX Model

This set is the speaker system in LBT-N300K/N350/N350K/N350P.

Photo: L-CH

SPECIFICATIONS

Speaker system

3-way system

Speaker unit

Woofer: 220 mm cone type

Tweeter: 65 mm cone type

Super tweeter: 20 mm dome type

Frequency range

50 Hz - 20,000Hz

Dimensions

270×476×235 mm

(10 3/4×18 3/4×9 3/8 inches) (w/h/d)

Mass

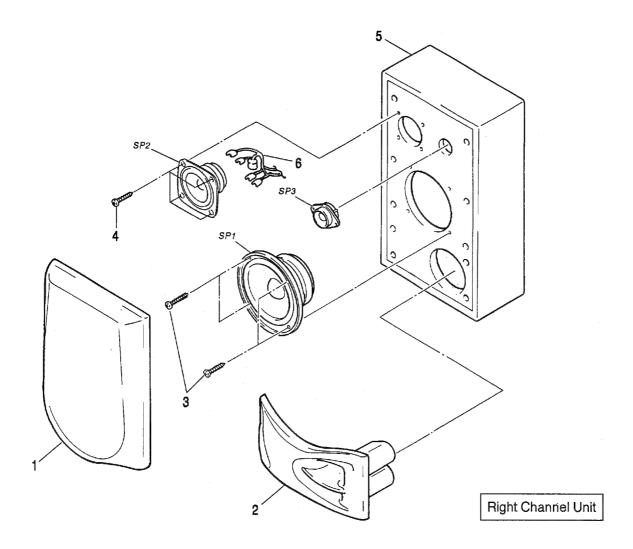
Approx. 5.4 kg

Design and specifications subject to change without notice.



EXPLODED VIEW AND PARTS LIST

- Items marked "* "are not stocked since
 they are seldom required for routine
 service. Some delay should be anticipated when ordering these items.
 The mechanical parts with no reference
 number in the exploded views are not
 supplied.



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1 1 2	X-4945-468-1 4-971-202-01	FRAME (L) ASSY, GRILLE FRAME (R) ASSY, GRILLE DUCT (L) ORNAMENTAL		SP1 SP2 SP3	1-504-872-11	SPEAKER (20cm) SPEAKER (6cm) SPEAKER (2cm)	
2 3		DUCT (R) ORNAMENTAL SCREW +BTP 4×20		******	*****	**************************************	********
4 * 5		SCREW (M3.5 \times 16) CABINET (L) ASSY, SPEAKER				******	
* 5 6		CABINET (R) ASSY, SPEAKER CORD, SPEAKER (WITH CONNECTOR)		*	4-972-653-01	CUSHION	

PS-LX56/LX56P

SERVICE MANUAL

Ver 1.1 2001, 07

PS-LX56/LX56P are the turntable section in LBT-A190/A195/A290/A290K/ A295/A390/A390K/A395/ A490/A490K/A495/D150/ D250/D550/G1000/G2000.



PHOTO: PS-LX56

US Model Canadian Model PX Model Tourist Model PS-LX56 AEP Model E Model

Australian Model

UK Model PS-LX56P

PS-LX56/LX56P

SPECIFICATIONS

Turntable

Platter Motor Drive system Speed Wow and flutter Signal-to-noise ratio Automatic system

Pivot-to-stylus length Overall arm length

Cartridge

Type Frequency response Stylus

General Dimensions

Power requirement

Weight

Power consumption Accessory supplied Optional accessories (PS-LX56)

30cm (12 in.) DC servo motor Belt drive 33 ⅓ rpm/45 rpm switchable 0.2% (WRMS) 60 dB (DIN-B) Return, reject

Dynamically blanced 203 mm (8 in.) 235 mm (9 1/4 in.)

Moving magnet type 20 Hz-20kHz CN-234

 $355 \times 94 \times 345 \text{ mm(w/h/d)}$ $(14 \times 3^3/_4 \times 13^5/_8 \text{ inches})$ Approx. 2.5 kg (5 ib 8 oz)

US and Canadian model :120V AC, 60Hz European model: 220-230V AC, 50/60Hz

Australian model: 240V AC, 50Hz Model for other countries: 110-120V/220-240V adjustable with the

voltage selector AC, 50/60Hz

2 W 45-rpm adaptor (1) Replacement stylus CN-234 Stat spray XP-C10 Cleaner XP-C1, XP-C2

Turntable

Platter Tone arm type Cartridge type Stylus Mass Dimensions

(PS-LX56P)

30 cm Dynamically balanced Moving magnet type Sony CN-234 (0.6 mil diamond) Approx. 2.3 kg (5 lb 1 oz) Approx. 355 x 95 x 345 mm $(14 \times 3^3)_4 \times 13^5$, inches) (w/h/d, including projections)

Design and specifications subject to change without notice.

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression

> STEREO TURNTABLE SYSTEM SONY

9-959-216-12 2001G0200-1

Sony Corporation **Home Audio Company**

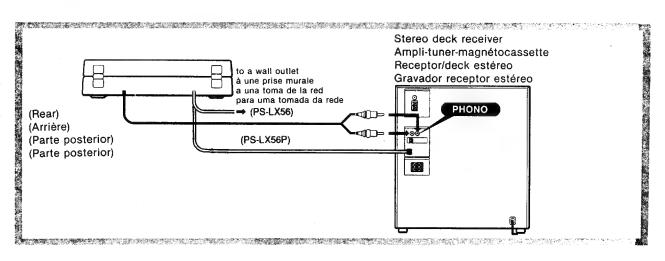
© 2001.7

Shinagawa Tec Service Manual Production Group

Connections

Note

Connect the red plug to the right-channel jack (R), and the white plug to the left-channel jack (L).



Notes on installation

- · Place the turntable on a level surface.
- Avoid placing the unit near electrical appliances (such as a television, hair dryer, or fluorescent lamp) which may cause hum or noise.
- Place the turntable where it will not be subject to any vibration, such as from speakers, slamming of doors, etc.
- Keep the unit away from direct sunlight, extremes of temperature, and excessive dust and moisture.

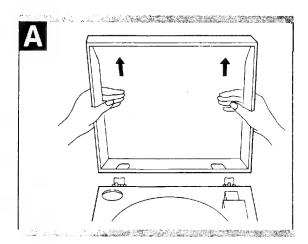
To remove the dust cover - A

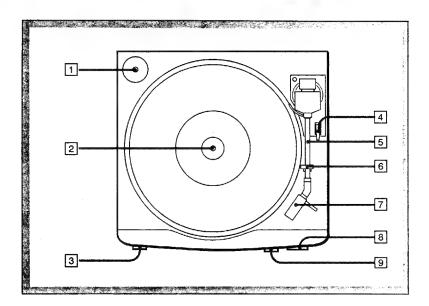
Open the cover fully and pull it up.

Location of Controls

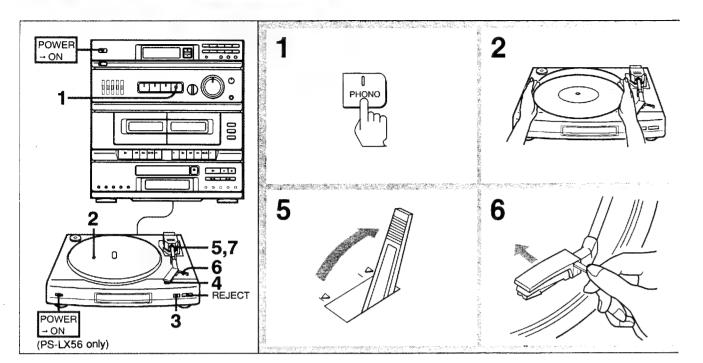
Nota

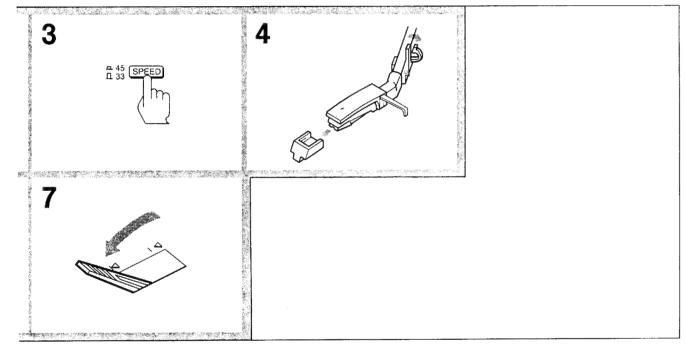
Conecte la clavija roja a la toma del canal derecho (R), y la blanca a la del canal izquierdo (L).





- 1 45-rpm adaptor
- 2 Centre spindle
- 3 POWER switch (PS-LX56)
- 4 Cueing lever
- 5 Tonearm
- 6 Armrest
- 7 Cartridge
- 8 REJECT button
- 9 Speed selector





When the record is played to the end, the tonearm returns to the armrest and the turntable stops.

To stop during play, press REJECT.

To play a different part of the record

Lift the tonearm by setting the cueing level to ▼, move the tonearm by hand to the desired point, then set the cueing lever to ▼.

To play a 17-cm record
Use the supplied adaptor

If the tonearm moves outward when you move it colse to the centre

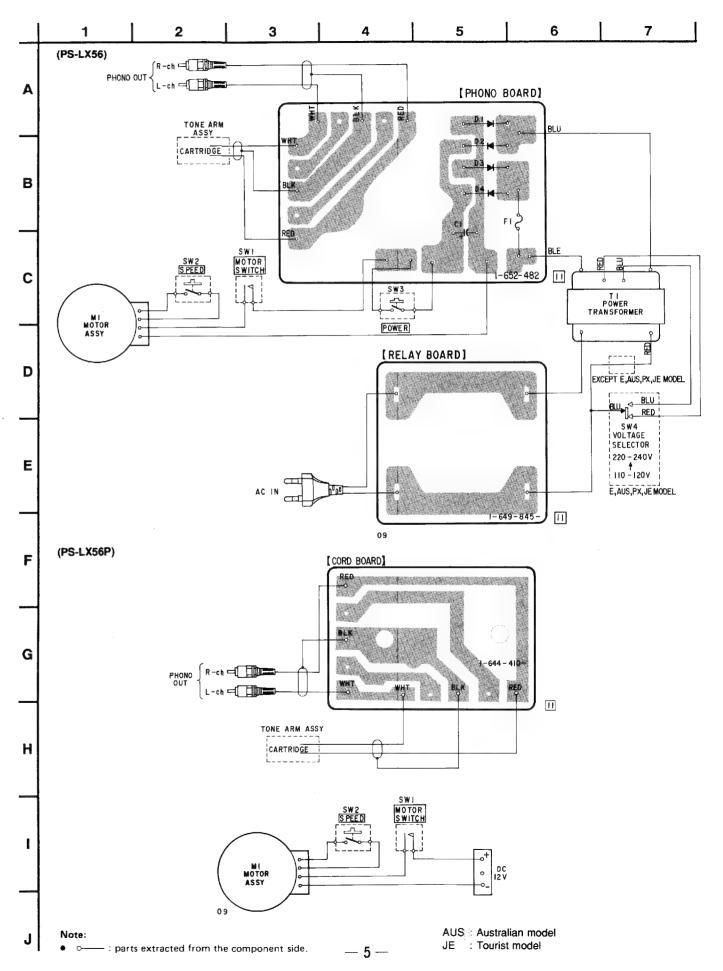
Do not resist this movement, as it may damage the automatic return mechanism.

If the tonearm does not return to its armrest Press REJECT.

SCHEMATIC DIAGRAMS

· Switches : (PS-LX56) Ref. No. Switch Position SW1 MOTOR OFF SW2 SPEED 33 SW3 POWER OFF MOTOR ASSY MI D1 - D4 HES2 EXCEPT E, AUS,PX,JE Model CARTRINGE ------(PS-LX56P) MOTOR ASSY MI [CORD BOARD] 8.3 SW2 SPEED 45 PRPM 1 CARTRIDGE All capacitors are in μF unless otherwise The components identified by mark A noted. pF:µµF 50WV or less are not Ref. No. Switch Position SW1 MOTOR OFF or dotted line with mark Δ are critical for indicated except for electrolytics and Replace only with part number specified. SW2 SPEED 33 • All resistors are in Ω and 1/4W or less SW3 POWER OFF unless otherwise specified. Les composants identifiés par une VOLTAGE 240V SW4 marque A sont critiques pour la AUS : Australian model SELECTOR sécurité. JE : Tourist model Ne les remplacer que par une pièce portant le numéro spéci-fié.

WIRING DIAGRAMS



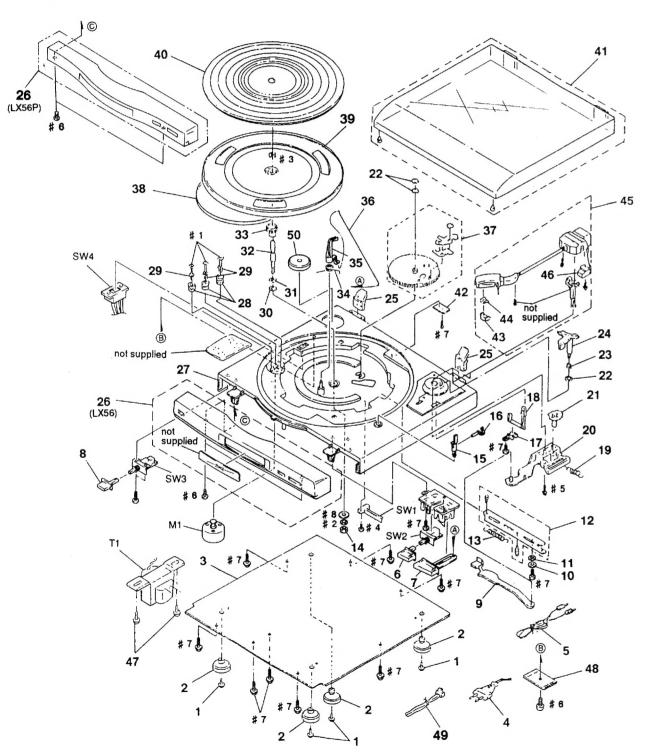
Ver 1.1 2001.07 Ver 1.1 2001.07

EXPLODED VIEW

- · -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- AUS : Australian model The components identified by mark CND : Canadian model A or dotted line with mark A are • EE : East European model critical for safety. Replace only with part number IT : Italian model specified.

Les composants identifiés par une marque A sont critiques pour la sécurité.

Ne les remplacer que par une piéce portant le numéro spécifié.



MX : Mexican model

• EA : Saudi Arabia model

• SP : Singapore model

MY : Malaysia model

• JE : Tourist

Pef. No. Part No. Description Remark 1						
2 4-96-0-91-01 PLASTIC STAND 3 4-96-190-01 PLASTIC STAND 4 1-573-651-61 CORD, AC (LASS: AEP, EA, EE, IT, MX, NY, CIS, SP) 4 1-573-651-61 CORD, AC (LASS: CMD, US) 4 1-590-074-11 CORD, AC (LASS: CMD, US) 4 1-590-08-11 CORD, AC (LASS: CMD, US) 5 1-551-61-11 CORD, AC (LASS: CMD, US) 5 1-551-61-11 CORD, AC (LASS: CMD, US) 6 4-96-177-11 KNOB SPEED. (BLACK) 6 4-964-177-11 KNOB SPEED. (BLACK) 7 4-964-178-01 KNOB SPEED. (BLACK) 7 4-964-178-01 KNOB SPEED. (LASS-SILVER, SILVER METALLIC) 8 4-964-178-01 KNOB SPEED. (LASS-SILVER, SILVER METALLIC) 8 4-964-18-01 KNOB FORE (LASS-SILVER, SILVER METALLIC) 9 4-964-18-01 KNOB FORE CLASS-SILVER, SILVER METALLIC) 10 4-690-713-00 VASSER 10 4-960-7487-00 VASSER 11 3-659-351-00 VASSER 12 4-947-485-01 STRING (2) 13 4-947-485-01 STRING (2) 14 4-947-465-01 AMM REST 16 4-947-485-01 STRING (2) 16 4-963-355-01 LINK RETURN 20 4-963-355-01 LINK RETURN 21 4-963-355-01 LINK RETURN 22 4-947-465-01 STRING (2) 23 4-947-465-01 STRING (2) 24 4-947-465-01 STRING (2) 25 A-4600-976-A FRONT PAREL (0) ASSY (LASS: SILVER) 26 A-4109-19-1 AGREE AND (ASS) 27 4-947-650-01 COLLAR 28 4-947-650-01 COLLAR 29 4-947-650-01 COLLAR 30 3-451-152-00 WASSER (3) 4-947-950-01 COLLAR 31 4-947-950-01 COLLAR 32 4-947-650-01 COLLAR 34 4-947-650-01 COLLAR 34 4-947-950-01 COLLAR 35 4-947-950-01 COLLAR 36 4-947-950-01 COLLAR 36 4-947-950-01 COLLAR 36 4-947-950-01 COLLAR 36 4-947-950-01 COLLAR 36 4-947-950-01 COLLAR 36 4-947-950-01 COLLAR 36 4-947-950-01 COLLAR 36 4-947-950-01 COLLAR 36 4-947-950-01 COLLAR 36 4-947-950-01 COLLAR 36 4-947-950-01 COLLAR 36 4-947-950-01 COLLAR 36 4-947-950-01 COLLAR 36 4-947-950-01 COLLAR 36 4-947-950-01 COLLAR 36 4-947-950-01 COLLAR 37 4-947-950-01 COLLAR 38 4-947-950-01 COLLAR 39 4-947-950-01 COLLAR 30 4-947-950-01 COLLAR 30 4-947-950-01 COLLAR 31 4-947-950-01 COLLAR 31 4-9	Ref. No.	Part No.	$\underline{\text{Description}} \qquad \underline{\text{Remark}}$	Ref. No.	Part No.	<u>Description</u> Remark
## 1-890-693-11 CORD, AC (LX56: AUS) ## 1-690-670-21 CORD, AC (LX56: UK) 1-555-116-11 CORD, PRODO(BLACK) 4-964-117-01 RNOB SPEED(BLACK) 4-964-117-01 RNOB SPEED(BLACK) 4-964-117-01 RNOB SPEED(BLACK) 4-964-118-01 RNOB REJECT(BLACK) 4-964-118-01 RNOB REJECT(BLACK) 4-964-118-01 RNOB REJECT(BLACK) 4-964-184-01 RNOB REJECT(BLACK) 4-964-184-01 RNOB POPER (LX56:BLACK) 4-964-184-01 RNOB POPER (LX56:BLACK) 4-964-184-01 RNOB POPER (LX56:BLACK) 4-964-184-01 RNOB POPER (LX56:BLACK) 4-947-487-01 RETURN LINK 10	2 * 3 <u>↑</u> \4	4-950-490-01 4-961-804-01 1-575-651-61	PLASTIC STAND BUTTON BOARD CORD, AC (LX56: AEP, EA, EE, IT, MX, MY, CIS, SP)	40 41 * 42	4-947-539-01 A-4604-946-A 1-652-482-11	RUBBER MAT DUST COVER ASSY PHONO BOARD (LX56)
A -964-178-01 KNOB REJECT (BLACK) A -964-178-11 KNOB REJECT (BLACK) A -964-178-11 KNOB REJECT (BLACK) A -964-178-11 KNOB POPER (LXS6:SILVER SILVER METALLIC) S 4-964-184-01 KNOB POPER (LXS6:BLACK) A -964-184-01 KNOB POPER (LXS6:SILVER, SILVER METALLIC) S -1571-089-11 S VITCH, PISH (OPER) (1 KEY) (LXS6) A -4604-947-487-01 RETURN LINK A -947-487-01 RETURN LINK A -947-487-01 RETURN LINK A -947-487-01 RETURN LINK A -947-487-01 RETURN ASSY, LEVER A -947-487-01 A -947-487-01 C LINK RETURN ASSY, LEVER A -947-487-01 C LINK RETURN ASSY, LEVER A -947-497-01 ARM REST A -947-497-01 ARM REST A -947-497-01 ARM REST A -947-497-01 C LINK RETURN ASSY A -947-497-01 A A -947-497-01 A -947-497-01 A A -947-497-01 A -947-497-01 A A -947-497-01 A A -947-497-01 A A -947-497-01 A A -947-497-01 A A -947-497-01 A A -947-497-01 A A -947-497-01 A A -947-497-01 A A -947-497-01 A A -947-497-01 A A -947-497-01 A A -947-497-01 A A -947-497-01 A A -947-497-01 A A -947-497-01 A A -947-497-01 A A A -947-497-01 A A A A A A A A A	<u>^</u> 4 <u>^</u> 4 5	1-690-608-11 1-696-570-21 1-555-116-11	CORD, AC (LX56: AUS) CORD, AC (LX56: UK) CORD, PHONO(BLACK)	44 45 46	4-951-290-01 A-4604-940-A 4-947-464-01	STYLUS (CN-234) ARM ASSY, TONE COUNTER WEIGHT
## 4-964-184-11 KNOB POWER ## 4-947-487-01 RETURN LINK ## 4-947-487-01 RETURN LINK ## 4-947-487-01 RETURN LINK ## 4-947-487-01 RETURN LINK ## 4-947-487-01 RETURN LINK ## 4-947-487-01 RETURN LINK ## 4-947-487-01 RETURN LINK ## 4-947-487-01 RETURN LINK ## 4-947-487-01 RETURN LINK ## 4-947-487-01 RETURN LINK ## 4-947-487-01 RETURN LINK ## 4-947-487-01 RETURN LINK ## 4-947-487-01 RETURN ASSY, LEVER ## 4-947-487-01 RETURN ASSY, LEVER ## 4-947-487-01 RETURN ASSY, LEVER ## 4-947-487-01 RETURN ASSY, LEVER ## 4-947-487-01 RETURN ASSY, LEVER ## 4-947-491-01 RETURN ASSY, LEVER ## 4-947-491-01 RETURN ASSY, LEVER ## 4-947-491-01 RETURN ASSY, LEVER ## 4-947-491-01 RETURN ASSY, LEVER ## 4-947-491-01 RETURN ASSY, LEVER ## 4-947-491-01 RETURN ASSY, LEVER ## 4-947-491-01 RETURN ASSY, LEVER ## 4-947-491-01 RETURN ASSY, LEVER ## 4-947-491-01 RETURN LINK ## 4-947-491-01 RETURN ASSY, LEVER ## 4-947-491-01 RETURN LINK ## 4-947-491-01 RETURN LINK ## 4-947-491-01 RETURN LINK ## 4-947-491-01 RETURN LINK ## 4-947-491-01 RETURN LINK ## 4-947-491-01 RETURN LINK ## 4-947-491-01 RETURN LINK ## 4-947-491-01 RETURN LINK ## 4-947-491-01 RETURN LINK ## 4-947-491-01 RETURN LINK ## 4-947-491-01 RETURN LINK ## 4-947-491-01 RETURN LINK ## 4-947-491-01 RETURN LINK ## 4-947-491-01 RETURN LINK ## 4-947-491-01 LEVER, CUEING ## 4-947-491-01 LEVER, CUEING ## 4-947-491-01 COLLAR ## 4-947-491-01 COLLAR ## 4-947-491-01 COLLAR ## 4-947-491-01 COLLAR ## 4-947-491-01 COLLAR ## 4-947-491-01 COLLAR ## 4-947-491-01 LEVER, CUEING ## 4-947-491-01 COLLAR ## 4-947-491-0	7	4-964-178-01	(LX56:SILVER, SILVER METALLIC) KNOB REJECT(BLACK) KNOB REJECT	49 50 M1 SW1	1-557-109-21 3-701-806-00 A-4604-945-A	CORD, DC (LX56P) ADAPTOR, 45 MOTOR ASSY
10 4-890-173-00 VASHER 11 3-659-350-00 VASHER 12 A-4604-947-A RETURN ASSY, LEVER 13 4-947-485-01 SPRING (22) 14 4-947-491-01 INIT 15 4-947-491-01 INIT 16 A-4660-1949-A RM CLIP ASSY 17 4-947-417-01 CUEING (BASE) 18 4-947-487-01 LEVER, CUEING 19 4-963-537-01 SPRING 20 4-963-536-01 LIVER, RETURN 21 4-963-536-01 LOVER, RETURN 22 4-947-514-01 ABM CS RING 23 4-947-467-01 SPRING (6) 24 4-947-514-01 ABM CS RING 23 4-947-467-01 SPRING (6) 24 4-947-467-01 SPRING (6) 25 A-4660-198-A HINGE ASSY 26 A-4384-982-A PANIEL (B) ASSY, FRONT (LX56: SILIVER) 27 A-4660-578-A FRONT PANEL (G) ASSY (LX56: BLACK) 28 A-4660-578-A FRONT PANEL (G) ASSY (LX56: GRAY) (US) 29 A-4660-578-A FRONT PANEL (G) ASSY (LX56: BLACK) 21 A-950-487-01 MAIN CABINET (B)(BLACK) 22 A-947-505-01 CUSHION MOTOR 29 4-947-505-01 CUSHION MOTOR 29 4-947-504-01 COLLAR 30 3-451-162-00 WASHER (56) 31 3-701-445-21 WASHER 32 4-947-499-01 SPRING (34) 33 4-947-499-01 SPRING (34) 34 4-947-499-01 SPRING (34) 35 4-947-499-01 SPRING (34) 36 4-947-499-01 SPRING (34) 37 A-4604-916-A GEAR ASSY, SPUR	8	4-964-184-11	KNOB POWER(LX56:SILVER, SILVER METALLIC)	S₩3 <u>1</u> \S₩4 <u>1</u> \T1	1-692-211-11 1-692-835-11 1-450-987-11	SWITCH, PUSH (POWER) (1 KEY) (LX56) VOLTAGE SELECTOR (LX-56: AUS, E, MX, MY, SP) TRANSFORMER, POWER (LX56: AEP, EE, IT, CIS) TRANSFORMER, POWER
15	11 12	4-890-173-00 3-659-350-00 A-4604-947-A	WASHER WASHER RETURN ASSY, LEVER	∆T1		TRANSFORMER, POWER (LX56: MY)
20	15 16 17	4-947-491-01 A-4660-499-A 4-947-477-01	ARM REST ARM CLIP ASSY CUEING (BASE)			
25	20 21 22	4-963-536-01 4-963-535-01 4-947-514-01	LINK RETURN ADJUST CAM 4MM CS RING			
26	25 26 26	A-4660-498-A A-4384-982-A A-4411-941-A	HINGE ASSY PANEL (B) ASSY, FRONT (LX56: SILVER) PANEL (B) ASSY, FRONT (LX56: SILVER METALLIC)			
(LX56:SILVER, SILVER METALLIC) 28	26 26	A-4660-578-A A-4660-976-A 4-950-487-01	FRONT PANEL (G) ASSY (LX56: BLACK) FRONT PANEL (G) ASSY (LX56P) MAIN CABINET (B)(BLACK)			
29			(LX56:SILVER, SILVER METALLIC)			
35 4-947-495-01 WIPER REJECT 36 4-948-101-01 SPRING (38) 37 A-4604-916-A GEAR ASSY, SPUR	29 30 31 32	4-947-504-01 3-451-162-00 3-701-445-21 4-947-498-01	COLLAR WASHER (56) WASHER STELL BALL			
	35 36 37	4-947-495-01 4-948-101-01 A-4604-916-A	WIPER REJECT SPRING (38) GEAR ASSY, SPUR			

Ver 1.1 2001.07

Remark

CORD PHONO RELAY

ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- · -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
- All resistors are in ohms METAL: Metal-film resistor METAL OXIDE: Metal Oxide-film resistor F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Hardware (# mark) list is given in the last of this parts list.

- SEMICONDUCTORS In each case, u: μ , for example: uA...: *μ* A..., uPA...: *μ* PA..., uPB...: μPB..., uPC...: μPC..., uPD...: μ PD..
- CAPACITORS $uF: \mu F$
- COILS uH : μ
- AUS • CND
- EE • IT
 - MX EA SP : Singapore mode
 - MY : Malaysia model • JE : Tourist

и	H
;	: Australian model
)	Canadian model
	: East European model
	: Italian model
	: Mexican model
	: Saudi Arabia model
	· Singapore model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque A sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

* 1-644-410-11 CORD BOARD (LX56P) ************************************	Ref. No.	Part No.	Descrip	otion	Remark	Ref. No.	Part No.	Description	Remark
* 1-652-482-11 PHONO BOARD (LX56) ************* *********** ********	*	1-644-410-11		, , ,					
* 1-652-482-11 PHONO BOARD (LX56)	******	*******	******	*********	*******				TO AED OND)
C1 1-126-012-11 ELECT	*	1-652-482-11		,/			3-758-045-21	MANUAL INSTRUCTION (English)(I	LX56 US, UK)
C1 1-126-012-11 ELECT 470uF 16V CDIODE > CLX56 AUS, E, PX, MX, EA, MY, SP, JE) 3-758-045-61 MANUAL INSTRUCTION (English, German, Polish) (LX56 EE, CIS) D1 8-719-200-82 DIODE 11ES2 B 8-719-200-82 DIODE 11ES2 CFUSE > A-947-532-01 SNOW BOX (L) * 4-947-533-01 SNOW BOX (R) 3-701-806-00 ADAPTOR, 45 ***********************************			< CAPACI	ITOR >				MANUAL INSTRUCTION	
D1 8-719-200-82 DIODE 11ES2 D2 8-719-200-82 DIODE 11ES2 D3 8-719-200-82 DIODE 11ES2 D4 8-719-200-82 DIODE 11ES2	C1	1-126-012-11	ELECT	470uF	16V		3-758-045-61	(LX56 AUS, E, PX, MX, EA	
D2 8-719-200-82 DIODE 11ES2 D3 8-719-200-82 DIODE 11ES2 D4 8-719-200-82 DIODE 11ES2			< DIODE	>				(English, German, Polish) (L)	(56 EE, CIS)
D2 8-719-200-82 DIODE 11ES2 D3 8-719-200-82 DIODE 11ES2 D4 8-719-200-82 DIODE 11ES2	D1	8-719-200-82	DIODE	11ES2		*	4-947-532-01	SNOW BOX (L)	
D4 8-719-200-82 DIODE 11ES2			_			*			
**************************************							3-701-806-00	ADAPTOR, 45	
<pre></pre>	D4	8-719-200-82	DIODE	11ES2		******	******	*****	****
#*************************************			< FUSE >	>		***************************************	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	*************************	*****
**************************************			· 100D /				*****	******	
**************************************	<u></u> ÆF1	1-532-613-XX	FUSE TIM	ME-LAG (T200mA)					
#1 7-621-773-87 SCREW (64) * 1-649-845-11 RELAY BOARD (LX56) ***********************************							*****	*******	
* 1-649-845-11 RELAY BOARD (LX56) ********* #2 7-623-210-22 WASHER (57) #3 7-624-110-04 6MM E RING #4 7-685-105-01 SCREW (59) #5 7-685-645-79 SCREW (68) #6 7-685-646-79 SCREW (60) #7 7-685-647-79 SCREW (58)	*****************				#1	7_691_779_07	CCDEW (CA)		
#3 7-624-110-04 6MM E RING #4 7-685-105-01 SCREW (59) #5 7-685-645-79 SCREW (68) #6 7-685-647-79 SCREW (60) #7 7-685-647-79 SCREW (58)	4	1 640 945 11	DEL AV DO	MDD (IVEC)					
#4 7-685-105-01 SCREW (59) #5 7-685-645-79 SCREW (68) #6 7-685-646-79 SCREW (60) #7 7-685-647-79 SCREW (58)	•	1-049-045-11						(,	
#6 7-685-646-79 SCREW (60) #7 7-685-647-79 SCREW (58)			*******	777		#4	7-685-105-01	SCREW (59)	
#7 7-685-647-79 SCREW (58)	******************					#5	7-685-645-79	SCREW (68)	
#7 7-685-647-79 SCREW (58)						#6	7-685-646-79	SCREW (60)	
								. ,	
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<u>MEMO</u>

PS-LX56/LX56P

REVISION HISTORY

Clicking the version allows you to jump to the revised page.

Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.1	2001.07	PDF registration
		(including: 9-959-216-81, 9-959-216-82, 9-959-216-83, 9-959-216-91)
1.0	1993.11	New

PS-LX56/LX56P

SONY

SERVICE MANUAL

US Model Canadian Model PX Model Tourist Model AEP Model **UK Model** E Model Australian Model

SUPPLEMENT-3

File this supplement with the service manual.

Subject: SILVER METALLIC MODEL ADDITION (PS-LX56)

- PS-LX56 (SILVER METALLIC MODEL) is similar to the earlier PS-LX56 (BLACK MODEL).
- Refer to the previous issued service manual for information not contained in this supplement-3.

DIFFERENCE TABLE

Page		PS-LX5	6 (BLACK Model)		PS-LX56 (SILVER METALLIC Model)			
	Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
7	6 7 8 26 * 27	4-964-177-01 4-964-178-01 4-964-184-01 A-4660-578-A 4-950-487-01	KNOB SPEED KNOB REJECT KNOB POWER (LX56) FRONT PANEL (G) ASSY MAIN CABINET (B)	(LX56:BLACK)	6 7 8 26 * 27	4-964-177-11 4-964-178-11 4-964-184-11 A-4411-941-A 4-950-487-11	KNOB SPEED KNOB REJECT KNOB POWER PANEL (B) ASSY, FRONT MAIN CABINET (B)	

NOTE:

· Items marked "*" are not stocked since they are seldom required for routine service.

Some delay should be anticipated when ordering these items.